TENDER SPECIFICATIONS

for the selection of a company for developing the

JUSTAT AIS

CONTENT

I. TERMINOLOGY AND ABBREVIATIONS

AACL – Agency for the Administration of Courts of Law

NBS – National Bureau of Statistics

CCD – Cost of complexity degree *(indicator)*

CPC – Cost per cause *(indicator)*

CR – Rate of variation of the stock of pending cases (the abbreviation comes from the name of the indicator in English "Clearance Rate") *(indicator)*

SCM – Superior Council of Magistracy of the Republic of Moldova

DEC – Duration of examined cases *(indicator)*

DPC – Duration of pending cases *(indicator)*

CEE – Number of cases examined per employee *(indicator)*

CEJ – Number of cases examined per judge *(indicator)*

ADCE – Average duration of cases examined *(indicator)*

DT – Estimated duration of the liquidation of the stock of pending cases *(the abbreviation comes from the name of the indicator in English "Disposition Time") (indicator)*

FTE (FTE formula) – period effectively worked

CD/CEE – Sum of complexity degrees of the cases examined per employee *(indicator)*

CD/CEJ – Sum of complexity degrees of the cases examined per judge *(indicator)*

KPI - Key Performance Indicator(s)

ICMP – Integrated Case Management Program *(unique application for automated documentation, evidence and control of the activity of electronic management of cases and of other procedural materials issued by the courts of law or submitted for examination within them.)*

RA – Rate of appeals *(indicator)*

RCD – Rate of cancelled decisions in relation to the number of issued decisions *(indicator)*

RCROS – Rate of cases resolved in one sitting *(indicator)*

RAD – Rate of amended decisions in relation to the number of issued decisions *(indicator)*

OER – Overall efficiency rate *(indicator)*

RSJ – Rate of court staff per judge *(indicator)*

RARJ – Rate of assistants and registrars per judge *(indicator)*

RCR – Rate of case resolution *(indicator)*

RACH – Rate of adjourned court hearings *(indicator)*

ECLJ – Effective case load per judge *(indicator)*

CLJCS – Case load per judge according to the organisational chart *(indicator)*

AIS – Automated information system *(set of programs and equipment which ensure automatic data processing)*

DB - Dashboard(s)

Business Intelligence (BI) refers to computer systems for identifying, retrieving, and analysing data available in an organisation, the purpose of which is to provide real support for decision-making and efficient business management. BI-type information systems have until recently been considered as tools intended for managers - solutions that provide the management of an organisation with the information needed to improve its overall performance. An operational-type BI system retains this property and supports daily activities through specific functionalities: real-time up-to-date information, secure access to data from any location, automated risk monitoring, analytical functions that are easy for any user to perform, without specialised support, etc. This change responds to the transition to a new organisational culture, that of a management based on clear, measurable objectives, assumed by the organisation and employees at every executive level.

Case – generally speaking, the case is a dispute that is referred to a court of law for resolution. A case is usually based on substantive law (civil, criminal, etc.) and involves opposing parties. There may also be non-litigious situations in which the courts will be summoned to issue a decision, cases being constituted and, accordingly, their files being drawn up, in accordance with the provisions of the procedural legislation.
In this document, the terms “case” and “file” are most often used as synonyms. Thus, in the names of indicators such as “Estimated duration of the liquidation of the stock of pending cases” and “Rate of case resolution”, the respective terms are interchangeable.

Application – the act by which any interested person may request the court for the settlement of a dispute or the examination of a matter in the procedural order established etc. Pursuant to Article 7 paragraph (3) of the Code of Civil Procedure, an application for summons is to be lodged in case of legal proceedings (litigation procedure), and in non-contentious cases, an application is filed. The application may be the precursor to a court case, but also situations are regulated in which applications are examined by the courts on their own and at different stages of examining certain cases. The nomenclature of the degrees of complexity, approved

by the Decision of the Superior Council of Magistracy no. 165/6 of 18 February 2014 and updated by SCM Decision no. 518/24 of 1 August 2017, provides for 9 categories of applications examined by the courts of law, including applications for relocation, applications regarding the annulment of the writ of execution, applications on the exception of illegality, etc.

File – all records, including documents and other elements of communication or evidence regarding a criminal, contraventional case, a civil or other litigation, existing at a certain point of the procedural activity and reunited for preparation, systematization, storage or administration thereof, in accordance with legal regulations. In the courts of law, cases are managed in the form of files with registration numbers and other mandatory identification and content elements. Files can take electronic form. Thus, the electronic case file is the data set that includes any electronic document, information received or prepared directly by the court in connection with a specific case, which can be examined using an electronic device.
In this document, the terms "file" and "case" are most often used as synonyms.

Average – represents the average value of a string of numbers. To calculate the average, the sum of a string of numbers is divided by the number of those added.
For example, the average value of 5 numbers: 40, 50, 70, 20 and 10 is the sum of these numbers, divided by 5, how many were initially added, i.e. 190/5 = 38,00.

Median – represents the mean value in a certain string of numbers. For example, the median value for the same five numbers 40, 50, 70, 20, and 10 is 40. To determine the median, the string of numbers is arranged in ascending order (10, 20, 40, 50, 70), and the median will be the number in the middle of this string, i.e. 40, in the example shown. Compared to the average, the median values are less often affected by extremes (minimum and/or maximum) compared to the average values, especially when the string of numbers is relatively low. Given that the average value is strongly affected by any extreme value in the string of numbers (one or two exceptionally high or low values can dramatically influence the average value), it is often preferable to use the median value as a reference value.

II. GENERAL INFORMATION

2.1. Defining the system

The JUSTAT Automated Information System (AIS) aims to be an online tool for consulting and analysing statistical data from the judicial system of the Republic of Moldova and represents the implementation at national level of the concept implemented at European level by the CEPEJ-STAT tool published by the European Commission for the Efficiency of Justice (CEPEJ). The JUSTAT AIS shall include dashboards with statistical data, performance indicators and other useful information for evaluating the results of the activity of the courts of law in the Republic of Moldova.

JUSTAT AIS shall ensure the collection, processing, storage and dissemination of statistical information from the judicial system, so as to allow users free, convenient and interactive access to information resources.

2.2. Target audience

JUSTAT AIS shall be managed by the Agency for the Administration of Courts of Law (AACL), and access shall be guaranteed to the general public.

By applying different criteria for filtering information and viewing options, JUSTAT AIS shall make available to the public, both general information on the entire judicial system of the Republic of Moldova, and information on individual courts of law.

2.3. Purpose and objectives

The main objective of JUSTAT AIS is to provide an intuitive public tool, based on WEB technology for exploring and analysing statistical data on the activity of courts of law in the Republic of Moldova, including of key performance indicators. JUSTAT AIS will help increase the transparency of the judicial system and will facilitate the understanding of different aspects of the activity of courts of law in society. This tool is intended to facilitate research

In the field of judicial management through statistical analysis, aimed at the objective evaluation of the performances of the courts of law, the identification of challenges, but also of good practices implemented in different courts.

Increasing society's trust in the judiciary and the satisfaction of users (citizens and other subjects who come into contact with the courts of law) depends, to a large extent, on the transparency, the quality of information on the activity of the courts of law and the predictability of the management policies and decisions of the judiciary, based on objective data and clear principles for ensuring effective access to justice, efficiency and quality.

JUSTAT AIS will contribute to improving the decision-making process regarding the distribution of resources between courts of law, the organisation of the judiciary, including the judicial map, the identification of the optimal number of judges and judicial staff, the establishment of performance benchmarks and the establishment of an environment conducive to their constant improvement, etc., by providing a quantitative and qualitative analysis of the activity of the courts of law.

III. SYSTEM INFORMATION RESOURCES

A starting point for the implementation of JUSTAT AIS would be the "Statistical file of courts", managed by AACL[2] and published on the page of the Superior Council of Magistracy. Due to this, it is recommended that the new instrument be published on the National Portal of Courts, which is to be improved, including by creating a section with information on the entire judicial system in the Republic of Moldova.

JUSTAT AIS is based on the following data collection sources:

1. The **Statistical database of the National Bureau of Statistics of Moldova (NBS)**, which allows to obtain data on the Stable Population[3], on January 1 of each year, by districts and municipalities *(see the Regional Statistics >> Population >> Interrupted series (based on the stable population) >> Stable population by districts, age, background and sex, at the end of the year)*. Respectively, when calculating the JUSTAT indicators, the information published by the NBS on the stable population (at national, district and municipal level), at the end of the year for which the indicator is calculated, will be taken into account. The JUSTAT AIS developer, shall establish the method for reflecting the data on the population in the system. As a matter of priority, the technical possibility

[2] https://aaij.justice.md/ro/content/despre-aaij

[3] https://statbank.statistica.md/PxWeb/pxweb/ro/60%20Statistica%20regionala/60%20Statistica%20regionala_ _02%20POP_POP/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774

of an automated procurement of data from the Statistical Data Bank of the National Bureau of Statistics shall be checked or the preference of a mechanism for entering data in the **Integrated File Management Program (IFMP)**, with the subsequent takeover thereof by JUSTAT AIS from the IFMP.

2. The **Integrated File Management Program (IFMP)**, in which there is data available on: the number of judges per court of law, both according to the states (number of judges assigned according to the legislation of a court of law), as well as calculated using the FTE formula; files pending at the beginning of a reference period, lodged with the court and examined during a reference period; the budget heading, in which the court indicates the total amount of the executed budget; etc.
3. The **Information system of the Ministry of Finance**, for accessing data regarding the state taxes collected.

The system involves the use of several sources of statistical data (interconnection with external systems).

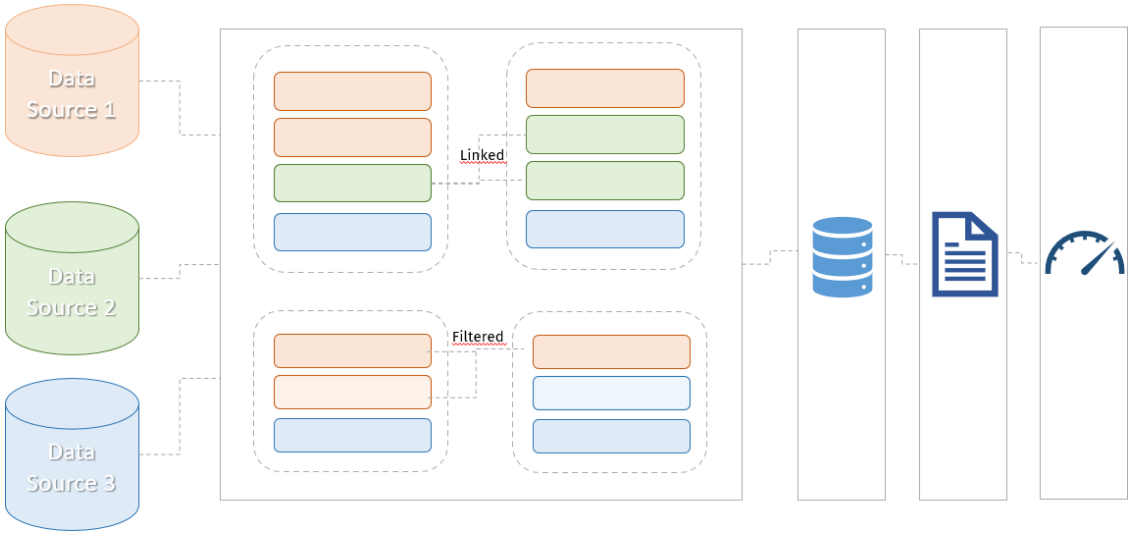


Figure 3.1 - Data sources

IV. TECHNICAL AND ACCESSIBILITY REQUIREMENTS

The design of JUSTAT AIS shall meet the compatibility and accessibility requirements in accordance with national and international specifications, such as W3C (World Wide Web Consortium, May 5, 1999) and WAI (Web Accessibility Initiative) recommendations, accepted worldwide as international standards in the field of web accessibility.

The content of the system shall be correctly displayed on all major Internet browsers (Internet Explorer, Microsoft Edge, Mozilla Firefox, Google Chrome) and accessible to people with disabilities.

JUSTAT AIS shall be written in PHP, which offers the ability of developing the system by using HTML, CSS, Bootstrap and JavaScript. MySQL shall be used for databases management. PHP is the most popular programming language in the world. Thanks to its many advantages and ease of use, millions of websites and web applications are created with this language.

The provider will have all the technical resources needed to implement the project, as well as for undertaking the necessary testing.

When implementing JUSTAT AIS, the following requirements shall be taken into account:

- The content management system shall be open-source and shall not involve additional costs;
- For the representation of the statistical data, an existing BI system shall be used (the expenses shall be included by the Provider in the financial bid) or personally developed;
- The system shall mandatorily contain a search field. This feature shall allow the use of an internal search engine of the site to find the information needed, based on a keyword or groups of keywords.
- Another desirable feature is the option to download the dashboard data or to generate a dashboard-based report, by exporting the data in a PDF file or Excel format.
- The solution shall provide means to prevent DoS attacks, SQL injection, cross-site scripting (XSS), cross-site request forgery (CSRF), etc.

Type of the operational system for the AIS to be implemented can be:

- Microsoft Windows or Linux.

The administration website shall allow authentication of the following categories of super users:

- Administrators;
- Web-editors;
- Validators.

Super users' access will meet the following requirements:

- Authentication is based on username and password;
- Implementation model of access rights per groups and roles;
- Administration interface shall allow control of the content administration rights,

security administration rights, etc., with an appropriate granularity;

- The access to various components of the administration interface shall be made only in the limit of the rights established for the respective groups and roles;

- The password configuration and update regime established by the beneficiary's security policy will be applied, which will be communicated to the developer at the assessment phase;

- Encrypt authentication data in the database so as to ensure data confidentiality.

Training and user guide

- The provider undertakes to provide the beneficiary with training courses/guides/instructions regarding this software at the request of the beneficiary, to ensure the implementation and efficiency in the usual use of the software stated in these specifications. With this aim a group of maximum 25 persons (representatives of the Agency for Court Administration, SCM and courts) shall be trained as super users in order to further share knowledge with their peers.

- The provider must provide the technical description of the product in the appropriate way and exemplify the most optimal way to use the software on different types of platforms and Information System on which it can be developed.

Deliverables:

- the IS installation package
- the technical description of the IS, which includes the system architecture and installation guide;
- the mechanism for monitoring the functionality of IS components;
- the guide for making backup copies and the order to restore the operation of the system[1]
- the database of the IS
- the interface of the IS
- the business intelligence.

V. PRINCIPLES USED IN DEVELOPING THE SYSTEM

In order to ensure the objectives of this tender specifications, in the process of developing

[1] Government Decision NO. 414 of 08-05-2018 on measures to consolidate data centres in the public sector and rationalise the administration of data information systems;

the JUSTAT AIS, the following general principles shall be taken into account:

- **Principle of legality**: which involves the creation and operation of computer subsystems in accordance with the national law in force and internationally recognized rules and standards in the field;
- **Principle of dividing the architecture into levels**: consists in the independent design of information subsystems according to the standards of the interface between levels;
- **Principle of platform independence**: the user interface of the information system shall not impose a certain software and hardware platform for the user's computer;
- **Principle of secure data**: stipulates the entering of the data into the system only through authorized and authenticated channels;

- **Principle of information security**: ensures an adequate level of integrity, selectivity, accessibility and efficiency for the protection of data from loss, alteration, damage and unsanctioned access;
- **Principle of accessibility of public information**: involves the implementation of procedures to ensure access of applicants to public information provided by the IT solution;
- **Principle of transparency**: involves the design and realisation, according to the modular principle, with the use of transparent standards in the field of information and telecommunications technologies;
- **Principle of expandability**: stipulates the possibility of extension and completion of the information system with new functions or the improvement of existing ones;
- **Principle of priority of the first person/s of the single centre**: implies the existence of a high-ranking responsible person, with sufficient rights to make decisions and coordinate activities for the creation and operation of the system;
- **Principle of scalability**: implies the provision of a constant performance of the IT solution as the volume of data and the load for the IT system increases;
- **Principle of simplicity and convenience of use**: involves the design and implementation of all applications, technical and software means accessible to system users, based on exclusively visual, ergonomic and logical design principles;
- **Principle of easy recovery**: the data is not critical as it is a copy of the existing data bases.

VI. SYSTEM PRODUCTIVITY AND RELIABILITY REQUIREMENTS

In order to ensure the efficient operation of JUSTAT AIS, the following requirements regarding the productivity and reliability of the system should be taken into account when designing it:

- The documents used to develop the web page must be elaborated taking into account this tender specifications;
- The page generation speed (response time) at the average daily visit frequency shall not exceed 5 seconds for a DSL connection with a speed of up to 5 Mbps, the recommended time being one second;
- The average number of competing users supported shall be 100;[4]
- The minimum number of requests/minute supported shall be 10;
- The capacity to respond, in a reasonable time interval, to a number of at least 1,000 unique visitors per month;

[4] The tender specifications and the technical characteristics are created based on the experience in web product development, as well as solution growth trends. It is considered that the system will be available to the citizens of the Republic of Moldova not only for static data visualization, but also for dynamic visualization (reports, filtering, search, etc.) using BI tools. Up to the MVP status, the system shall be created

with the planning of expansion and allocation of appropriate resources.

- Capacity to support at least 20 internal users with various roles, including of administration;
- Taking into consideration the complexity of the webpage content, it is necessary to create a browsing mechanism based on intuitive logic to allow to the visitors to get oriented in easy and convenient way, with a minimal number of actions for obtaining the needed information;
- In order to provide an adequate level of accessibility to the information, the webpage must be functional non-stop 24 hours out of 24 per day, 7 days per week, with minimal intervention of human factor.

VII. SYSTEM SECURITY REQUIREMENTS

Information security shall mean the protection of information resources against premeditated or accidental actions of a natural or artificial nature, which result in harm to the owners and users of the system.

The basic tasks of ensuring the information security of JUSTAT AIS shall be:

- Ensuring the confidentiality of information, namely preventing access to information of persons without appropriate rights and powers;
- Ensuring the logical integrity of information, preventing the unpunished introduction, updating and destruction of information;
- Ensuring the physical integrity of information;
- Authentication and authorization, directing access, registering actions;
- Given the importance of the data processed, it is essential to implement and adhere to the three fundamental principles of information security in the operation of the system:
- The confidentiality of data transmitted by the information system;
- Integrity of data, system itself (set ups, settings, etc.);
- Availability of the system in any conditions.
- JUSTAT AIS shall be configured so as:
- Not to allow unauthorized persons to modify or alter the information in the system;
- To ensure the consistency of the data and to allow the identification of the source of the initial data and of the persons who have accessed or registered this data in the system;
- The exchange of data with integrated databases shall be performed through secure channels, using dedicated standards and protocols such as XML, SOAP and HTTPS;
- Insertion of ads, links, banners or other commercial information is not allowed neither on the front-end interface, nor on the back-end interface.

VIII. THE LEGAL-NORMATIVE FRAMEWORK OF THE REPUBLIC OF MOLDOVA

The JUSTAT AIS, being part of the governmental sphere, shall be subject to or bound by the laws and decisions of the Republic of Moldova in force. The JUSTST AIS shall be developed with regards to the legal-normative space.

Legislation and decisions in force:

- DECISION No. 201 of 28.03.2017 on the approval of the Minimum Mandatory Cyber Security Requirements;
- LAW on telecommunications No. 241-XVI of 15.11.2007;
- LAW on access to information No. 982-XIV of 11.05.2000;
- LAW on informatics No. 1069-XIV of 22.06.2000;
- LAW on informatization and state information resources No. 467-XV of 21.11.2003;
- LAW on the protection of personal data No. 133 of 08.07.2011;
- LAW on state secret No. 106 of 17.05.1994;
- Government Decision regarding the special telecommunication systems of the Republic of Moldova Nr. 735 of 11.06.2002;
- Government Decision No. 794 of 01-08-2018 for the approval of the Regulation on the organisation and functioning of the Judicial Information System;
- Government Decision No. 593 of 24-07-2017 regarding the approval of the Technical Concept of the Judicial Information System;
- Government Decision No. 188 of 03-04-2012 regarding official web pages of the public administration authorities;
- Government Decision NO. 414 of 08-05-2018 on the measures to consolidate data centres in the public sector and rationalize the administration of data information systems;

IX. COPYRIGHT

- The tenderer will provide the beneficiary with the source code and will make available the standards and the tools of development applied, so that to allow further extension of the system, including extending the data exchange with external systems, as well as software upgrade.
- The beneficiary will maintain the exclusive intellectual property rights of all components of JUSTAT AIS and will hold all industrial and intellectual property rights of the ideas, concepts, know-how, source code, documentation.

X. METHODOLOGY REQUIREMENTS

The following development methodologies shall be accepted for developing the JUSTAT AIS:

- Agile[5] – which is an iterative approach in the software development process. In this model, the development and testing activities take place simultaneously. With this methodology, the MVP (Minimal Viable Product) version and first milestone shall be planned. Sprints, with system development compliance criteria shall be defined below. The system shall be implemented according to this plan, with tests and revisions at each sprint. The tenderer is required to create the MVP

version in the framework of the project, with the functions set out by the client at the planning phase of the project.

- Waterfall – running in a fixed order, and the project development team does not continue to the next stage of development or testing until the previous step has been successfully completed.
- Fragile - Hybrid model that involves development with waterfall and agile elements combined, based on needs, complexity, type of project, etc.

[5] In software development, agile practices include discovering requirements and improving solutions through the collaborative efforts of self-organised and cross-functional teams with end customers/users. It is based on planning, evolutionary development, early delivery, continuous improvement and flexible responses to changes in requirements, capabilities and understanding of issues to be resolved.

Image 10.1 Waterfall

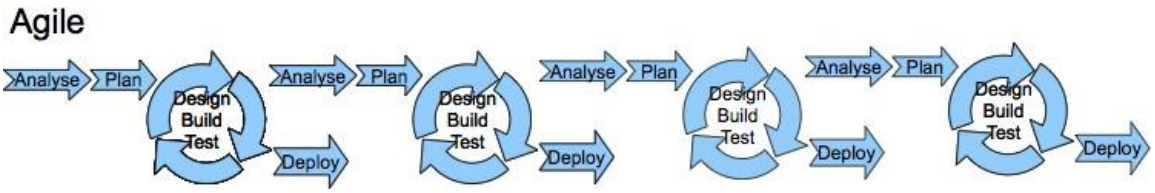


Image 10.2 Agile sprints

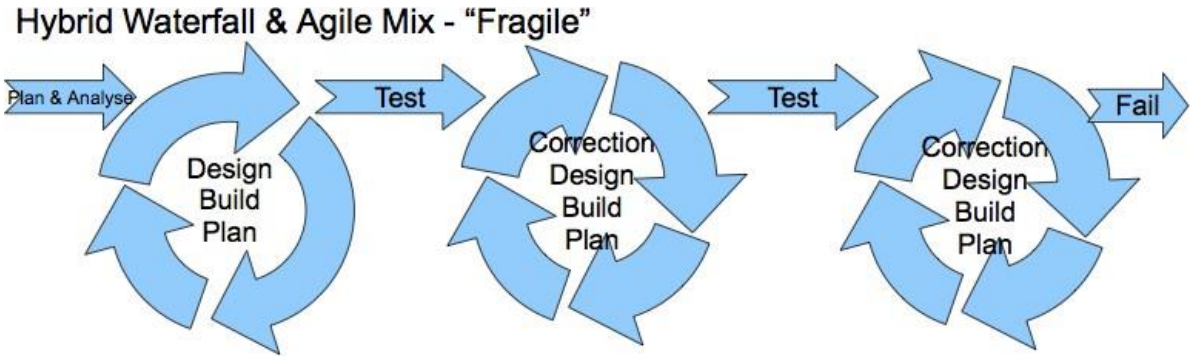


Image 9.3 "Fragile" hybrid model

The competitors may formulate the offer for the complete and comprehensive implementation of the JUSTAT AIS. Alternatively, taking into account the exclusion level for the budget, competitors may formulate the offer for implementation of the JUSTAT AIS system at the MVP level, with three fully functional dashboards (namely: dashboards IV, V and VI) out of the dashboards provided at section XVIII. SYSTEM CONCEPT. Such a product must be of sufficient value to users.

The MVP helps to determine the necessary functionality of the product and to spend efficiently the production resources based on the objectives set at the beginning of the development. In this sense, the MVP is a housing that consists of high priority functions. At the same time, the MVP is not a prototype, it contains only the most necessary functionality, but it should not be raw or primitive. On the contrary, the main functions of the MVP should work as well as possible.

By developing an MVP is considered:

- User journey map (user flow) - the path the user takes when interacting with the product;
- Lists of functions ranked by priority. It should start with the features most needed for the future product;
- Choosing the most appropriate type of MVP;

- Performing alpha tests (internal testing) and beta testing.

The system put into operation in such conditions must contain all the elements of the graphical interface, technical and functional design to facilitate the implementation of the other 3 dashboards. The MVP concept is an element of the Agile methodology in the process to develop the information solution, an intermediate deliverable, and not an "option" to reduce / limit the complexity of the deliverable, based for example on the available financial resources.

Image 10.4 MVP creation steps

***First define the MVP idea** – Define the purpose of the product and the problem it will solve*
***Product requirements** – List the product features. This will help you understand the product to a better extent.*
***Priority product requirements** – List the requirements to be implemented in the product.*
***PPR dependence** – It may happen that one feature of the product is dependent on another. It is important that you identify them in advance.*
***Build the product** – Develop and launch the product with defined product requirements*
***Feedback** – The most important element is feedback, which allows you to understand if you are on the right path*

XI. ELIGIBILITY CRITERIA

In the process of selecting the company for the development of JUSTAT AIS, the following eligibility criteria shall be taken into account:

No.	Name of the criterion/requirement	Proof of fulfilment of the criterion	Mandatory (YES/NO)
1.	A quote describing the financial offer	Confirmed by electronic signature or stamp	YES
2.	Technical bid	Confirmed by electronic signature or stamp	YES
3.	System implementation plan	Confirmed by electronic signature or stamp	YES
4.	Proof of registration of the legal entity, in accordance with the legal provisions of the Republic of Moldova	Registration Certificate	YES
5.	Act certifying the right to practice the requested services	Extract from the Register of Legal Entities	YES
6.	Bank details	Certificate of assignment of bank accounts	YES
7.	Fulfilment of obligations to pay taxes, fees and social security contributions, in accordance with the legal provisions in force in the Republic of Moldova	Certificate of no debt	YES
8.	Failure to apply administrative or criminal sanctions to the company or key personnel	Statutory statement, in free form	YES
9.	Statement of availability of the key personnel proposed	Statutory statement, in free form	YES
10.	Minimum 10 years' experience in developing information systems	Confirmatory documents, in free form	YES
11.	To have at least 3 recommendations on the development of information systems	Confirmatory documents, in free form	YES
12.	To have at least 3 projects that provide for the collection and management of statistical information and data,	List of similar contracts, indicating the contracting authority, the object of the contract, duration thereof	YES

	creating reports		
13.	Experience in the field of information systems maintenance	List of similar contracts, indicating the contracting authority, the object of the contract, duration thereof	YES
14.	Existence of the required resources for the proper fulfilment of the object of the contract	CVs of key staff, which shall include the skills and experience in the technologies specified in this tender specifications	YES
15.	Certificate of conformity issued by an accredited certification body: Certificate of conformity of the ISO 9001 quality management system or equivalent	Confirmed by electronic signature or stamp	Submission thereof shall be an advantage
16.	Certificate of conformity issued by an accredited certification body: Certificate of conformity of the information security management system ISO 27001:2013 or equivalent	Confirmed by electronic signature or stamp	Submission thereof shall be an advantage

Table 11.1 - Eligibility criteria

XII. KEY PERSONNEL

The Tenderer shall submit in its the technical bid summary data regarding the personnel involved in the project and its qualifications. The involvement of qualified personnel with experience in the development and implementation of information systems of similar complexity is welcome. Key data regarding the persons employed in the following positions shall be submitted:

- Project coordinator
- Business analyst
- UI/UX Designer
- Lead developer
- Secondary developer
- Network administrator
- Tester

All job descriptions are based on requirements of the Moldovan IT market. They apply mostly to Junior+ (secondary developer) and Middle (other positions described) level specialists. The project requires staff with experience of at least 3-5 projects of similar complexity, because its development is limited in time and has greater complexity, taking into account the development of the BI tool.

For these positions, the CVs of the experts shall be attached to the technical bid, which demonstrates compliance with the minimum requirements set out below for:

Project coordinator:

- Higher education or vocational education in the field of IT or business and administration;
- Minimum 3 years' experience in coordinating IT projects;
- Minimum 5 projects of similar complexity managed, conducted as project manager;
- At least 3 projects for the performance of which the methodologies proposed in this tender specifications were used;
- Knowledge of Romanian and English;
- Ability to simultaneously solve various problems and to effectively manage the working time;
- Strong negotiation, influencing, organisation and communication skills;
- Strong knowledge of project management software tools and best practices;
- Certificate issued by an internationally recognized institution in the field of project management (PMP, PRINCE or equivalent) - constitutes an advantage.

Business analyst:

- Higher education or vocational education in the field of IT or business and administration;
- Knowledge in business process modelling in information systems;
- Minimum 5 years' experience in business analysis;
- Minimum 3 projects of similar complexity managed, conducted as a business analyst;
- Analytical thinking, creativity, ability to manage stress;
- Knowledge of Romanian and English;

UI/UX designer:

- Minimum 3 years' experience in designing information systems interfaces;
- Minimum 3 projects of similar complexity, in which he/she participated as a UI/UX Designer;

- Experience with design applications and other software tools used in UI design. (e.g. Photoshop, Ilustrator, Fireworks, etc.);
- Knowledge of HTML, CSS, JavaScript - constitutes an advantage;
- Certificate issued by an internationally recognized institution in the field of UX Design - constitutes an advantage.

Lead developer:
- Master's degree in the field of IT;
- Minimum 3 years' experience in developing IT projects;
- Minimum 5 projects of similar complexity managed, conducted as a developer;
- Advanced knowledge of PHP and its frameworks (especially Laravel);
- Advanced knowledge in developing SQL databases, writing and optimizing SQL statements, keys, relations, indexes, etc .;
- Experience with Linux, Git, Nginx / Apache;
- Ability to simultaneously solve various problems and to effectively manage the working time;
- Ability to develop the project architecture, to identify and avoid risks;
- Experience in code review and optimization;
- Knowledge of Romanian and English;

Secondary developer:
- Higher education or vocational education in the field of IT;
- Minimum 1 year of experience in developing IT projects;
- Minimum 3 projects of similar complexity in which he/she participated;
- Knowledge of PHP and its frameworks (especially Laravel), HTML, CSS, JavaScript, SQL;
- Experience in code review and optimization;
- Knowledge of Romanian and English;

Network administrator:
- Minimum 5 years' experience as a network administrator;
- Experience in developing and supporting the technical infrastructure of the company;
- Experience in managing Linux/Unix servers;
- Experience in installing, configuring and supporting Nginx/Apache;
- Experience in installing, configuring and supporting DBMS (especially MySQL);
- Experience with network equipment;
- Skills for management of MS Windows Server AD, DNS, GPO operating systems;
- Zabbix hardware and software status monitoring;

Tester:

- Minimum 3 years' experience in testing IT projects;
- Minimum 3 projects of similar complexity in which he/she participated as a tester:
- Experience in code review and optimization;
- Experience in creating test cases, requirements, scenarios and test data to be used in the process;
- Experience in developing methods for improving the systems;
- Knowledge of Romanian and English;

XIII. TERMS AND STAGES OF IMPLEMENTATION

The terms set out in this tender specifications and the sequence of stages listed below shall be taken into account in the development of the JUSTAT SIA:

No.	Stage	Description	Deadline (calendar days)
1.	The completion stage of the contract	The contract shall be signed by both parties	Not later than 10 days after choosing the winner
2.	System design stage	Based on the terms of reference, the Provider shall determine and analyse the requirements, shall design the structure of the IT system and shall create the technical load	Stage II shall start no more than 30 days after the completion of stage I. So as to comply with the project calendar plan (completion of MVP in Q4 2022 - Q1 2023) Stage II shall last up to 14 days.
3.	The design development stage	The Provider shall offer between 1 and 3 design options, and the Beneficiary shall provide feedback, following which the necessary adjustments shall be conducted	Shall start no more than 7 days after the completion of stage II. It shall last up to 30 days.
4.	The prototype stage of the design	The design shall be transposed into code	It shall start no more than 7 days after the completion of stage III. It shall last up to 30 days.
5.	The stage of development of the system modules and functionalities	The Provider shall develop the application code and shall integrate its modules, according to the agreed technical load	It shall start no more than 7 days after the completion of stage IV. It shall last up to 90 days.

6.	System testing stage	The system shall be tested by both the Provider and the Beneficiary, ensuring that the conditions of the technical load have been fulfilled	It shall start no more than 7 days after the completion of stage V. It shall last up to 14 days.
7.	Training stage	The Provider shall provide the documentation of the administration of the system and shall instruct the Beneficiary for the use of the system	It shall start no more than 7 days after the completion of stage VI. It shall last up to 5 days.
8.	The stage of commissioning the system	The system shall be launched, being open for public access	It shall start no more than 7 days after the completion of stage VII.
9.	Support stage	The Provider shall fix any errors occurred during the maintenance period, as well as shall provide support in using the system and shall assist in maintaining the capacity of the system	It shall start no later than 7 days after the signing of the takeover-handover act for the system. It shall last for 12 months.

Table 13.1 - Implementation stages

XIV. DOCUMENTS

List of documents expected from the solution provider during the development of the JUSTAT AIS:

- Project plan, taking into account that the project shall be developed with Agile and/or hybrid methodology;
- Technical documentation that shall include: System architecture document;
- Model of components, including narrative description of all components, the links between them and integration interfaces with other external systems/components;
- Logical model;
- Data model;
- Implementation model, including narrative description of all nodes and links between them. This model shall also contain the precise specifications of the equipment and operating environments for the operation of the system at normal parameters, as well as specifications for a minimum configuration;
- Diagrams and/or sequence of activity;
- Detailed technical requirements for the required hardware (servers, storages, networks, etc.);
- Testing documentation per stages;
- System installation and configuration guide (to include at least how to install the application, what are the hardware and software requirements, platform description, administration, configuration and use, application configuration, disaster recovery procedures);

- The Contractor shall provide details regarding the test method and the results obtained. The Contractor shall perform performance testing for at least two components: load testing and stress testing;
- Detailed description of the web page content management system;
- Necessary guidelines for the administration and use of the online platform management system

XV. EVALUATION CRITERIA

In the process of selecting the company for the development of JUSTAT AIS, the following criteria for the evaluation of the bid shall be taken into account:

No.	Criterion	Description	Weight
1.	Price of the bid	The weighted minimum price shall be calculated by the formula: the lowest price bid (***Pmin***) shall be compared to the total price of the bid (***Pn***) and multiplied by the weight of the criterion **Pmin/Pn * weight**	50%
2.	Competence, experience of the company and of the key personnel	The Tenderer with the highest number of projects of similar complexity shall receive the maximum value of the weight. Lowest degree of coverage - 0. The rest of the bids shall be quantified according to the following formula: ***En/Emax*weight***, where **En** - Number of projects, ***Emax*** - the maximum number of projects submitted	15%
3.	Execution times	The Tenderer with the shortest execution time shall receive the maximum value of the weight. The shortest time shall be divided by the time of other Tenderers and multiplied by 0.2. (Example: It is assumed that there are 3 Tenderers. Tenderer 1 - 90 days Tenderer 2 - 100 days Tenderer 3 - 120 days The shortest time shall be divided by the rest. 90/90*20%= 0.2 90/100*20%= 0.18 90/120*20%= 0.15 Respectively, 20%,18%,15%)	15%
4.	Methodology/approach proposed	A coherent analysis and implementation methodology in relation to the project objectives is submitted *(No – 0%, Yes – 20%)*	20%

Table 15.1 - Bid evaluation criteria

XVI. DELIVERABLES

No.	Deliverable	Description	Period
1.	Technical load	Includes description of designed concept, business processes, implementation requirements and the database;	At the design stage of the system
2.	Administration Guide	Describes the administration of each module and each functionality of the system, and interface of the JUSTAT AIS	At the stage of training the Beneficiary
3.	Source code	Archive with system code	At the commissioning stage of the system
4.	Technical specifications	Include the characteristics of the technologies used, versions, technical requirements, business intelligence	At the commissioning stage of the system

Table 16.1 - Bid evaluation criteria

XVII. POST-IMPLEMENTATION SUPPORT

The provider shall undertake to provide support for 12 months from the commissioning of the system. During this period, the Provider shall ensure the elimination of all technical errors that have occurred as a result of the development.

The support services shall include:

- Receiving incidents by phone, email or ticketing system;
- Incident assessment and resolution;
- Monitoring and ensuring the proper functioning of the system;
- Consultation on the cause of incidents' occurrence;

The response terms that the Provider shall provide are set out below:

Severity of the incident	Description	Time to Resolution
Critical	Severe problem that prevents the operation of the entire system	Maximum 8 hours
High	Problem that has a high influence on the operation of the system/ restricts the use of a part of the system	Maximum 24 hours
Average	Problems related to system malfunctions, but do not cause system damage or interruption	Maximum 5 hours
Low	Problems with low impact on system operation. Or the	Maximum 10

	components function well, but the beneficiary requests adjustments that do not require additional functionalities	hours

Table 17.1 - Resolution times

XVIII. SYSTEM CONCEPT

17.1. Dashboards' organisation and data visualisation

The **dashboard (DB)** is a visual representation of the data in the form of tables, schema, graphs, diagrams, maps, stairs, possibly colour-coded, etc. This visual representation is an evaluation and management tool, which aims to track, analyse and display data regarding the performance level of an organisation or work process and centralize them in a single location (a "one-stop shop"). In other words, the dashboard is a tool for understanding and improving the performance of a particular organisation, system or process, by focusing on relevant performance indicators.

There are different classifications of dashboards. A classification worth mentioning divides the dashboards according to their purpose: operational, analytical, tactical and strategic. In this regard, the operational dashboards monitor the key performance indicators of the organisation and describe the current level of performance. Analytical dashboards facilitate the analysis of operational data to help users better understand the current situation, developments and establish objectives. Tactical dashboards filter and segment data at a more detailed level than analytical dashboards, capitalize on the interactive nature of the data, and further advance the analysis needed for future strategies. Finally, strategic dashboards are those that focus on long-term objectives, set in advance, and reflect the progress made towards achieving them, while highlighting the specific initiatives that are important to achieve those objectives.

Dashboards can also be classified according to the object of observation, namely – the performance of the entire judicial system, of a court, or the performance of the individual judge. This classification shall divide the dashboards accordingly into system-level, court-level and judge-level dashboards. The design of a dashboard at judge level shall require adjustments with regards to the composition of the data and indicators, in order to accommodate the functionalities concerned, the role and the needs of the individual judge. An example of such a personalized judge-level dashboard is that of the daily management of judicial tasks. That being said, JUSTAT does not aim to assess the performance of individual judges or to facilitate the management of judicial tasks for them. Respectively, JUSTAT shall not contain data targeting identified or identifiable judges.

The time element is essential for any dashboard. In JUSTAT, an annual display shall be used as the basic/default setting. However, the dashboard filtering tools shall allow the user, when deemed feasible and useful, to filter the data on a quarterly, semi-annual basis. The information (indicators, tables and diagrams) that allow an analysis of the evolution from a chronological perspective, shall be displayed in annual intervals, for periods of 3-5 years.

The first step in creating a dashboard system is to identify the data elements that deserve to be included in the system, as well as to establish the need, significance, but also the possibility of harmoniously combining several data, into one or a series of dashboards. Not all data that can reasonably be reflected in the dashboards need to qualify as key performance indicators. For example, the dashboards of court systems often reflect the number of cases brought to court over a period of time, as well as the distribution of this mass across major categories of cases. This information is important from several points of view (for example, it may contain indications of a social or economic crisis, an increase in crime, the need for legislative measures or, on the contrary, positive developments such as the success of an alternative dispute resolution mechanism; it can serve as a basis for increasing or decreasing, changing specialization, training human resources, etc.), but it does not *per se* reflect the ”performance” of the courts concerned, but a state of affairs dictated by the social developments over that period of time.

Key Performance Indicators (KPIs) are data that are the result of a performance measurement and are, generally, expressed in a numerical figures and a unit of measurement. The numerical figure provides information on the quantity or magnitude *(how many/how much?)*, and the unit of measurement is the object being tested *(what?)*. For example, one of the most commonly used performance indicators in court systems around the world is the number of cases resolved over a period of time (3 months, 6 months, 1 year, etc.).

KPI constitutes a set of predefined data that, ideally, satisfy the following requirements:

- consistency with performance objectives - KPI must provide relevant data on the desired performance objectives of the organisation, process, unit, etc*. (in the case of JUSTAT - the performance objectives of the courts of law and on the administration of the justice process);*
- clear definition - KPIs must be simple and easy to understand/interpret;
- trend reflection - KPI must indicate trends over time;
- correlation with internal and external changes in the organisation - KPI must “be sensitive” to changes inside or outside the organisation;

- simplicity of data collection - data collection and processing for KPI must involve the least possible effort;
- sustainability - KPIs must be upgraded easily and quickly.

These six requirements or criteria will help to identify and define the list of key performance indicators, i.e. highly relevant and recommended indicators, which should be displayed in an efficient system of dashboards for the evaluation and management of courts of law.

One or more KPIs can be displayed in one dashboard, and the combination of different KPIs in one dashboard shall depend on the analytical needs, practical considerations, and ingenuity of the authors.

The concept of a key (!) performance **indicator** leads us to the idea that there are more important and less important indicators. An advanced, well-designed and reliable computerized file management system, which is constantly updated and monitored, can provide data regarding a long list of relevant information and performance indicators. At the same time, the degree of interest and importance given to different indicators shall depend on the purpose and the target audience. It is obvious that a judge, a party to a lawsuit, a minister of justice or a member of the Superior Council of Magistracy will request various information and may be concerned with various performance indicators.

At the same time, it shall be taken into account that the publication of a large number of KPIs may unnecessarily complicate the process of data collection and analysis, for the purpose of designing and implementing a dashboard and, in addition, may overwhelm the user with less important information. Therefore, in order to propose a concise and practical list of KPIs, this concept shall focus on indicators that meet the six requirements listed above.

Some practical reasons for using KPI include the following:

- KPIs are an integral part of the overall assessment of the degree to which the organisation's performance meets the organisation's objectives and strategic plan. In other words, performance indicators focus on the issues relevant to achieving the required results and provide feedback on the progress made in achieving the objectives of the organisation. In this regard, measuring and improving the performance in the judiciary (results-oriented management) affects multiple aspects of the judiciary, with a particular focus on the administration of justice, access to justice and the right to a trial that is fair and within a reasonable time;

- Performance indicators improve communication both internally (between different court employees, for example) and externally (between the judiciary and litigants or stakeholders, as well as the general public);
- Performance indicators support the decision-making process by demonstrating the potential of a particular reform, program, process or policy and can provide justifications for arguing the objectives, pertinence, relevance and costs thereof.

17.2. Dashboards and key performance indicators

17.2.1. Dashboard I: Organisation of the courts of law

The dashboard on the organisation of the court system provides in a single screen an overview of the organisation of the courts of law in the Republic of Moldova (number of courts by level of jurisdiction, their geographical location, number of judges and their distribution by courts, population served, resources and volume of files reported for the population served). This dashboard shall allow anyone to view a summary image on the organisation of the court map and the distribution of the main resources of the judiciary compared to the number of cases.

The dashboard on the organisation of the court system shall contain the following KPIs:

1. The number of judges and the rate of judges per 10 thousand inhabitants;
2. The number of pending cases and their rate per 10 thousand inhabitants;
3. The number of cases examined and their rate per 10 thousand inhabitants;
4. The court budget and the budget rate per 10 thousand inhabitants;
5. The state tax collected and the state tax rate per 10 thousand inhabitants;

Proposed definitions and calculation formulas:

1. **The number of judges per 10 thousand inhabitants** represents the number of judges in a court/level of courts/system, calculated according to the FTE formula for the reference year reported (divided) by the number of inhabitants (stable population at the end of the reference year) in the territorial divisions of the courts concerned or at national level and multiplied by 10 thousand inhabitants.
   Number of judges per 10 thousand inhabitants = NJ/NI*10 000
2. **The number of pending cases per 10 thousand inhabitants** represents the total number of cases pending before a court/level of courts/system during the reference year (sum of pending cases on January 1 and of

those registered during the reference year) in relation to the number of inhabitants (stable population at the end of the reference year) in the territorial divisions of the courts concerned or at national level and multiplied by 10 thousand inhabitants.
Number of pending cases per 10 thousand inhabitants = NC/NI*10 000

3. **The number of cases examined per 10 thousand inhabitants** represents the total number of cases examined by courts/level of courts/system during the reference year relative to the number of inhabitants (stable population at the end of the reference year) in the territorial divisions of the courts concerned or at national level and multiplied by 10 thousand inhabitants.
   Number of cases examined per 10 thousand inhabitants = NC/NI*10 000
4. **The budget per 10 thousand inhabitants** represents the budget actually executed6 by the court/level of courts/system in the reference year relative to the number of inhabitants (stable population at the end of the reference year) in the territorial divisions of the courts concerned or at national level and multiplied by 10 thousand inhabitants.
   The budget per 10 thousand inhabitants = Budget executed MDL/NI * 10 000
5. **The state tax collected per 10 thousand inhabitants** is the state tax collected by the court/level of courts/system in the reference year relative to the number of inhabitants (stable population at the end of the reference year) in the territorial divisions of the courts concerned or at national level and multiplied by 10 thousand inhabitants.
   State tax collected per 10 thousand inhabitants = State tax collected MDL/NI * 10 000

Data availability:

Population data will be collected, as mentioned above, from the statistical database - National Bureau of Statistics of Moldova (NBS).

According to Annex 2 of Law 76/2016 on the reorganisation of courts of law, the localities in the division of the courts are established by district courts, but not by offices (given that some courts have several offices).

The number of judges per court of law is available in the ICMP, both according to the lists (number of judges assigned according to the legislation to a court) and calculated using the FTE formula.

In ICMP, data are available with regards to:

- cases pending at the beginning of a reference period, submitted to courts and examined during a reference period;

- budget heading in which the court indicates the total amount of the executed budget. A uniform approach to the categories of expenditure included by the courts in the amount of the budget actually executed shall be established, which will be used to calculate the indicators reflected in JUSTAT;
- state tax collected. It will be welcome to document, in a 100% volume, the reimbursement of the state tax in case of refusal to receive in procedure or of restitution of the applications for summons, or to examine the possibility of extracting the respective data from the information system of the Ministry of Finance.

Methodological recommendations for the use of the dashboard:

Dashboard I shall provide a clear and comprehensive picture of the distribution of judicial resources across the country, dependant on socio-demographic factors. The information presented shall allow a quick assessment of the balance in the distribution of the main resources of the judiciary (judges and budget) compared to the population to whom access to court is ensured, or to the total number of cases pending during the reference year, and, respectively, the main results of the activity - the number of files examined and the state tax collected. Any significant imbalance shall be analysed, with the proposed remedial solutions. For example, when comparing the number of judges per 10 thousand inhabitants in different courts of the same level, imbalances can be identified or confirmed, which could be verified by analysing other relevant indicators such as the Number of cases examined per judge and the Total number of degrees of complexity of the cases examined per judge, etc.

Dashboard I and the evolution of the indicators it contains over a period of 3-5 years could provide some suggestions on the effectiveness and efficiency of the courts of law, depending on their size, geographical location, specialization, implementation of advanced judicial management practices, etc. For example, the increase of the total number of cases examined per 10 thousand inhabitants, given that the number of judges per 10 thousand inhabitants has remained constant, may indicate an increase in the efficiency of the courts of law.

A significant imbalance in the number of cases pending before courts of the same level could indicate some economic, social and demographic phenomena that deserve the attention of the authorities, including of those involved in the administration of the courts of law.

The information in Dashboard I shall facilitate the understanding of important aspects of judicial efficiency, shall allow the monitoring of developments related to

reforms that directly or tangentially affect the judiciary and will thus influence decision-making at national and court level.

Examples of graphic presentation and data search/visualization options:

The possibility of visualizing the data in both diagrams/charts and tables shall be ensured. In order to consult the various visualisation options and to select the most intuitive, informative and easily perceivable model for users, the examples of the graphic presentation in CEPEJ-STAT and other examples of dashboards in the field of justice shall be consulted.

In the case of Dashboard I, the use of a diagram based on an interactive map of the courts may be preferred, for example:

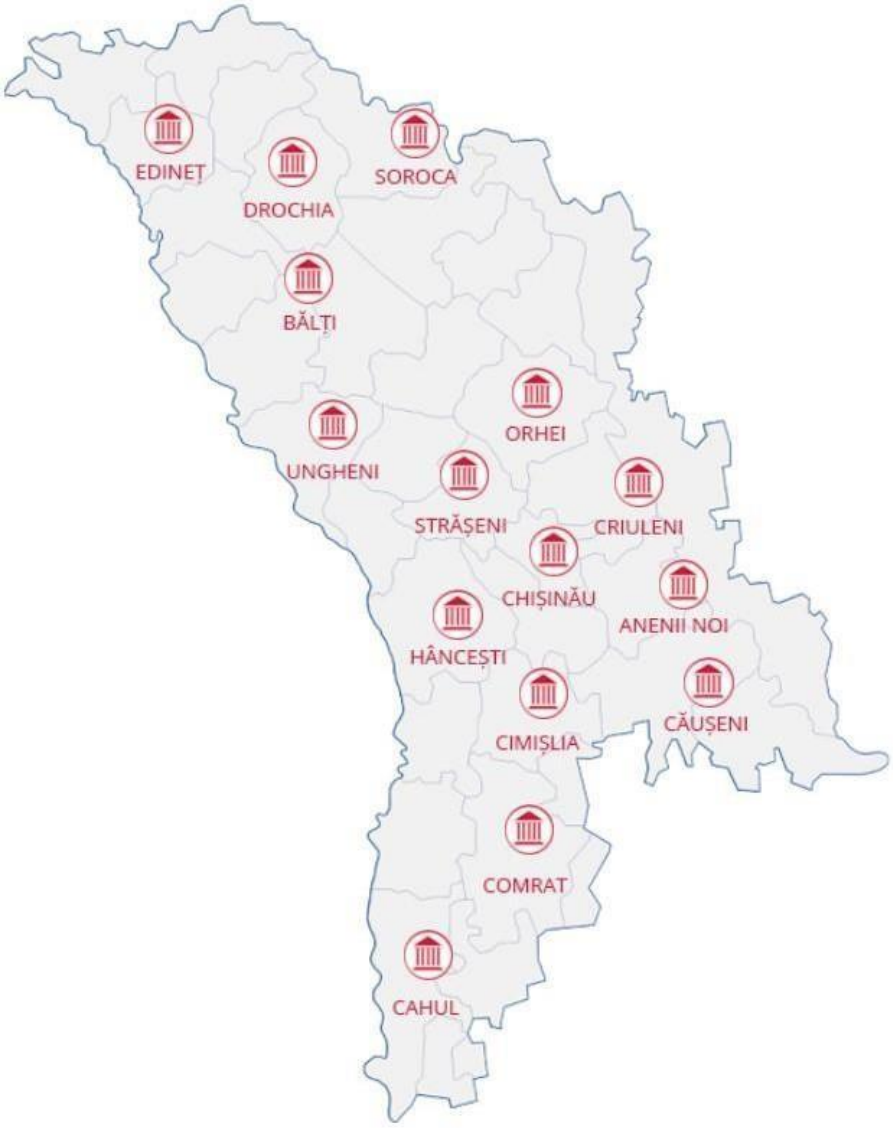


Figure 17.1 - Map of the courts (source: justitietransparenta.md)

Other examples of possible DB visualisations (source: CEPEJ-STAT):

Figure 17.2 - Example of DB visualisation

Example of presenting *the information on the interactive map*
Example of integration *in the TB interface of the bar with filtering tools*
Example of diagrams *that reflect the evolution over time of indicators, the comparison of the value for a concrete unit with the average or the median, etc.*

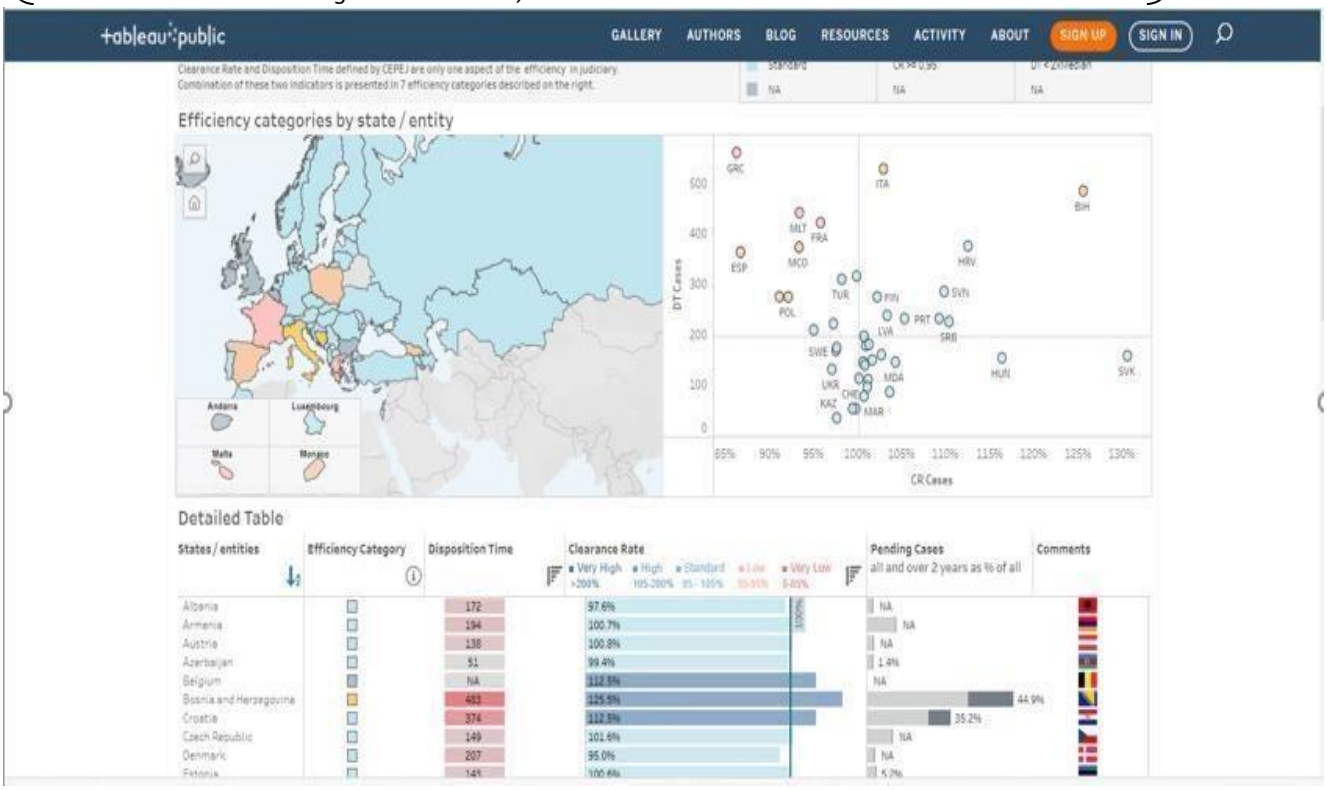


Figure 17.3 - Example of DB visualisation

17.2.2. Dashboard II: Human resources of the courts of law

The human resources dashboard of the courts shall continue the logic of the first DB and shall deepen the analysis of data regarding the most valuable and important resource of the

judiciary – judges and the staff of the courts of law. This dashboard shall allow anyone to

visualize a summary image of the distribution of human resources in the judiciary. It shall provide an overview of the structure of human resources in the courts of law. Data on different categories of court staff/employees shall be disaggregated according to the gender criterion (preferably, also by the professional experience criterion, in the respective category of court employees).

The human resources dashboard of the courts of law shall contain the following information:

1. Number of judges during the reference period (FTE units);
2. Number of judicial assistants during the reference period (FTE units);
3. Number of registrars during the reference period (FTE units);
4. Number of administrative staff during the reference period (preferably, FTE units);
5. Number of technical staff during the reference period (preferably, FTE units);
6. Rates of court staff per judge: RSJ and RARJ:

Proposed definitions and calculation formulas

Rate of court staff per judge (RSJ) = Number of court staff (all categories - assistant registrars, administrative and technical staff)/number of judges;

Rate of assistants and registrars per judge (RARJ) = Number of assistants and registrars/number of judges.

Human resources represent the number of court employees, by category, during a reference period. The evidence and reporting of human resources shall take into account the concept of "Full-Time Equivalent" (FTE).

The staff per judge determines the ratio between the number of employees in a court and the number of judges in the same court during a period of time.
The rates regarding the number of staff (all categories mixed) of a court judge or the number of assistants and registrars (categories of staff with direct responsibilities in the administration of the act of justice) of a judge, may be reflected.

Full Time Equivalent (FTE)

The human resources available to courts of law during a period of time shall be indicated by reference to the Full-Time Equivalent (FTE). To facilitate the calculation of FTE units, it shall be proceeded as follows:

- The number of judges or staff who have worked throughout the year, without exceptional interruptions, shall be calculated. For example, 8 judges have continuously worked during that calendar year
  - in this case, 8 FTE units shall be assigned.
- For the judges or staff who have not worked throughout the entire calendar year in question, the FTE shall be calculated separately. The absence of judges or staff during the regular annual leaves, as well as sick leaves of no more than 14 calendar days shall not be taken into account, in order to reduce FTE units. For example, a judge has worked in court for a period of 3 months (3/12 = 0.25 FTE) and another has worked for 4 months (4/12 = 0.33 FTE) of a calendar year. These two judges together, shall be included in the court statistics and indicators as 0.58 FTE units.
- The above FTE units shall be summed up, in order to calculate the total to be reported to the court (8 + 0.58 = 8.58 FTE).

Data availability

In the ICMP, data on the employees who use the ICMP and its functions, shall be entered. It is necessary to accurately complete the list of functions in the ICMP, which shall be conducted at the administrator level. Furthermore, through the ICMP, the absences of the main categories of employees are highlighted, which allows for the calculation of the FTE indicator.

Methodological recommendations for the use of the dashboard

The performance and efficiency of a court cannot be ensured if a shortage of staff is found at its level, or this is one of the main causes that determines the delayed execution of procedural acts in court. The analysis of the rates of court staff per judge can be particularly useful for decision-makers in the context of developing staff policies and staff management methodology. The analysis and comparison of these data could highlight certain trends or even anomalies in the staff structure or in the process of selecting/hiring of court staff (e.g., gender discrimination, age). Similarly, this data can be used, for example, to argue the need to delegate new judges or to hire additional staff. In formulating the conclusions, we suggest the interpretation of the information in DB II together with the KPI regarding the efficiency of courts (such as CR, DT, DPC, CEJ, CEE, etc.)

These rates could be of interest to educational institutions that train non-judicial staff and which, through their analysis, could develop their future curricula offers.

Examples of graphic presentation and data search/visualization options

The user shall be able to select from the list, items that he/she is interested in, with the possibility of simultaneously displaying in the DB several indicators from the list. Information on court staff rates per judge can be generated by graphical or tabular presentation.

Example of diagram for DB II (source: Guide for the implementation of pre-selected CEPEJ tools in the courts of the Republic of Moldova):

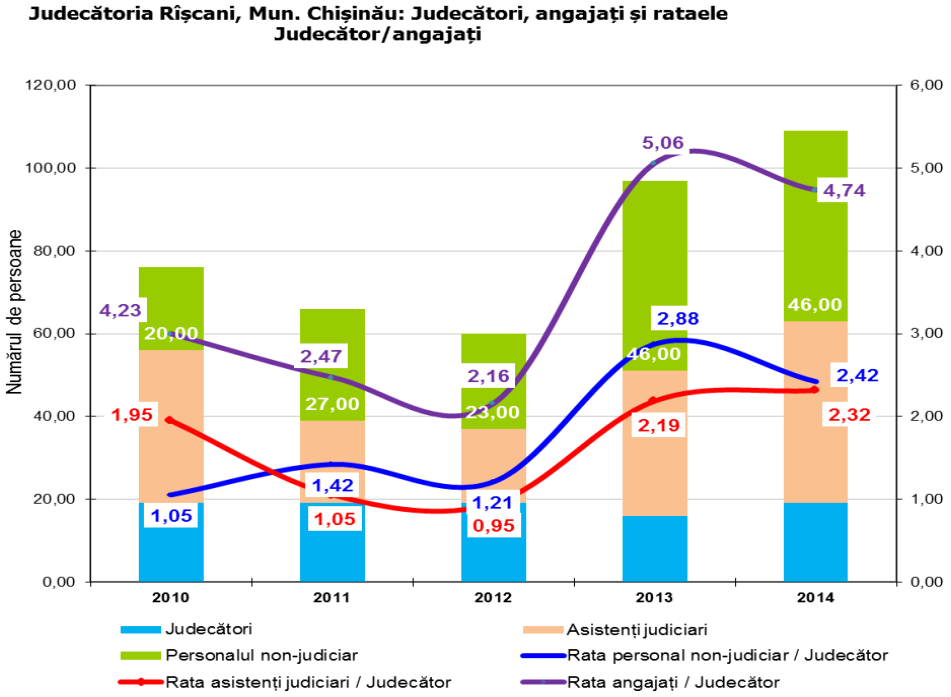


Figure 17.4 - Example of diagram for DB II

Rîșcani District Court, Chișinău Mun.: Judges, employees and judge/employee rates

Judecători = Judges
Personalul non-judiciar = Non-judicial staff
Rata asistenți judiciari / Judecător = Judicial assistants / Judge rate
Asistenți judiciari = Judicial assistants
Rata personal non-judiciar / Judecător = Non-judicial staff / Judge rate
Rata angajați / Judecător = Employees / Judge rate
Număr de persoane = Number of persons

Other examples of possible DB visualisations (source: CEPEJ-STAT):

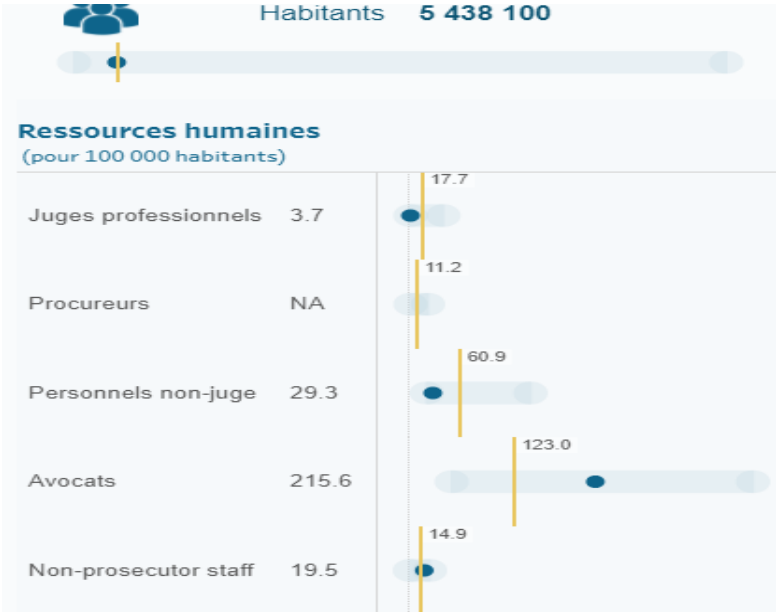


Figure 17.5 - Example of DB visualisation

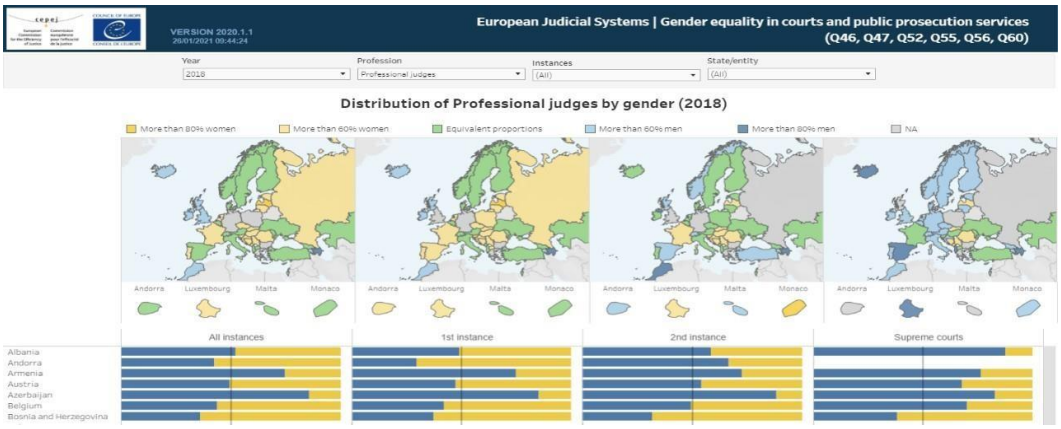


Figure 17.6 - Example of DB visualisation

17.2.3. Dashboard III: Volume and structure of cases pending before the courts of law

The dashboard targeting the volume and structure of cases pending before the courts, will facilitate the assessment of the stress which the courts of law in the Republic of Moldova are subjected to, including the evolution over time of the case load. This dashboard shall allow anyone to visualise a more detailed picture of the flow of cases, generally and by different categories of cases. The data shall be presented over a period covering the last four years (2017-2020).

The Dashboard on the volume and structure of cases pending before the courts of law shall contain information on the:

1. Number of cases pending at the beginning of the reference period, recorded and examined during the reference period.
2. Number/share of criminal cases pending at the beginning of the period, recorded and examined during the reference period;
3. Number/share of contraventional cases pending at the beginning of the period, recorded and examined during the reference period;
4. Number/share of civil, commercial and administrative contentious cases pending at the beginning of the period, recorded and examined during the reference period.

Proposed definitions

In order to assess the efficiency and management of judicial systems, but also of individual courts of law, the capacity to differentiate the main categories of cases and to analyse the workload, taking into account the specific complexity of the cases in those categories, is of great practical importance. Depending on the objectives pursued, simpler or more complex case classification systems can be used, sometimes using parallel or complementary systems. It is clear that not all cases are the same in terms of the complexity and efforts required for the settlement thereof. Most often, systems classifying cases by categories focus either on the branches of law and, implicitly, the specialization of judges, or on the procedural differences, in particular the length of the examination and the complexity of the procedural safeguards applicable. Above all many other considerations, statistical data shall be automatically collected for the selected categories of cases. There are many judicial systems that, in order to facilitate the introduction and use of dashboards, have chosen to use a minimum number of case categories. In this respect, CEPEJ Handbook operates with examples of DB that most often refer to 4 categories of cases: civil; criminal; administrative; and commercial. CEPEJ refers in its biennial reports on the evaluation of European judicial systems to 3 categories of cases: administrative; civil and commercial, contentious; and criminal.

The main categories of cases reflected in JUSTAT

What are the classifications of case categories examined by the courts of law in the Republic of Moldova? It is clear that, for the purpose of evaluating the efficiency of the judiciary and of the courts of law at the level of JUSTAT's target audience, the applicable classification should not be too complex, focusing on the broad categories of cases.

By the Decision of the Superior Council of Magistracy no. 165/6 of February 18, 2014 (amended and updated by SCM Decision no. 518/24 of August 1, 2017) the Regulation on establishing the single national complexity levels of civil, criminal and contravention judicial cases and the Nomenclature of complexity levels, component part of the Regulation, was approved. Namely, in the context of implementing the system for establishing the complexity levels, it was necessary to comprehensively review all the categories of cases that can be examined in the courts pf law at all levels (first instance, appeal and recourse). The nomenclature of complexity levels refers to 3 main categories of cases: 1) criminal cases; 2) contraventional cases; and 3) civil, commercial and administrative contentious. This way, the Nomenclature of complexity levels assigns any file, application, material that may be subject to examination by the court to one of these three broad categories of cases.

Each major case category is made up of several sub-categories as follows:

1. CRIMINAL CASES: 20 sub-categories (including "other categories"), most of them delimited on the basis of the chapters of the special part of the Criminal Code, with references to the concrete articles of the code;
2. CONTRAVENTIONAL CASES: 16 sub-categories (including "other categories"), most of them delimited based on the chapters of the special part of the Contravention Code, with references to the concrete articles of the code;
3. CIVIL, COMMERCIAL AND ADMINISTRATIVE CONTENTIOUS CASES (the majority delimited on the basis of the sections of Title II of the Code of Civil Procedure, but without references to the concrete articles of the code):

1. CONTENTIOUS PROCEDURE;
2. ADMINISTRATIVE CONTENTIOUS PROCEDURE;
3. SPECIAL PROCEDURE;
4. ORDINANCE PROCEDURE;
5. PROCEDURE FOR DECLARATION OF INSOLVENCY.

At the same time, based on Art. 54 of the Law on the organisation of the courts, the courts of law present to the Superior Council of Magistracy and the Agency for the Administration of Courts of Law, statistical information regarding the cases examined in civil, commercial, administrative contentious, contraventional and criminal matters, in the manner established by the courts. By the SCM Decision no. 835/27 of October 14, 2014, the Instruction on the electronic statistical reporting in district courts and courts of appeal was approved, in force since January 1, 2015. The SCM highlights the importance of judicial statistics, which provide essential information on the work of the courts, through the means of collecting the judicial statistical information: The Electronic Statistical Reporting Module and the

Court Performance Measuring Module of ICMP. By the SCM Decision no. 85/8 of May 5, 2020, amendments to the Instruction on the electronic statistical reporting in district courts and courts of appeal, were approved.

The above-mentioned regulations refer to 50 statistical reports for the district courts (classified into 3 main categories: civil cases; criminal cases; contraventional cases), 37 statistical reports for the courts of appeal and 20 general statistical reports. As such, ICMP currently generates approximately 107 electronic statistical reports. Numerous electronic statistical reports refer to certain categories of causes, for example:

- Statistical report on the activity of the courts of first instance regarding the examination of civil files (index number 2);
- Statistical report on the activity of the courts of first instance regarding the examination of commercial files (index number 2c);
- Statistical report on the examination of cases according to the Administrative Code (index number 3) etc.

But many of them cover very specific needs for the analysis of judicial statistics and, respectively, do not have a primary focus on the categories of cases. For example, the Statistical Report on the application of action measures or the Statistical Report regarding the activity of district courts on the examination of civil cases by judicial mediation focuses on procedures in the context of civil proceedings and not on categories of cases. The Statistical Report regarding the activity of the first instance on the trial of criminal cases as regards the natural persons or the Statistical Report regarding the activity of the court of first instance on the trial of criminal cases as regards the juveniles focuses on the categories of persons involved as defendants in criminal cases etc.

Certainly, the large number and the specificity of the statistical reports generated by the ICMP are dictated by the (evaluation, monitoring, formulation of future policies, etc.) needs of different entities - public authorities, research institutions, civil society organisations, etc., including the requirements of international organisations such as the UN or the Council of Europe. The analysis of the statistical reports generated by the ICMP does not provide an answer in order to narrow the classification of the files in a nomenclature for JUSTAT. This is because JUSTAT is exclusively focused on information and quantitative indicators of the effectiveness, efficiency and quality of the activity of the courts of law. From this perspective, the JUSTAT nomenclature shall be limited to a reasonable number of categories of cases, classified according to their pertaining to the main branches of law and depending on the intensity of the judicial efforts required to resolve them. However, the analysis of the statistical reports generated by ICMP is important in order to verify whether this system will

automatically and simply generate the statistical data for the categories of cases adopted by JUSTAT.

Information reflected in Dashboard III:

The working group for the development of the national instrument for the publication of judicial statistics following the CEPEJ-STAT example, has intensively discussed the subject and, in order to facilitate the process of development and implementation of the JUSTAT instrument, proposes the approval of the reporting in Dashboard III, but also in other JUSTAT dashboards, where appropriate, of statistical data regarding the workload of the courts of law, disaggregated on the following 3 categories of cases:

1) criminal cases;
2) contraventional cases;
3) civil, commercial and administrative contentious cases.

At the same time, based on the discussions in the working group, taking into account the results of the court guidance pilot programme for the implementation of CEPEJ tools, conducted during 2015-2017, and anticipating an evolving development of JUSTAT capabilities and quality, it is recommended to take into account the following nomenclature of the main categories and sub-categories of cases, for a more advanced version of Dashboard III. This nomenclature is largely in line with the Nomenclature of the complexity levels.

The main categories of cases with some subcategories
1. Civil cases (contentious procedure)
2. Commercial cases (contentious procedure)
3. Insolvency cases
3.a Basic procedures
3.b Disputes related to the accounts receivable
4. Administrative contentious cases
5. Criminal cases
6. Materials examined by the investigating judge
7. Contraventional cases;
8. Cases from other categories
8.1 Special procedure
8.2 Ordinance procedure
8.3 Materials on the enforcement of court decisions
8.4 Recusals, abstentions, transfers
9. Applications
Calculated total of cases

Table 17.1 - Categories of cases

Data availability

The ICMP integrates complex nomenclatures that allow the automated collection and reporting of data, both for the purpose of operation of the system of assigning the complexity levels of all cases registered in courts of law and the statistical reporting system, through the BI module, with the 100+ electronic statistical reports. As the nomenclature proposed for JUSTAT is simple, it is assumed that all data required for its application are accessible in the ICMP. Moreover, the ICMP is already implementing the so-called "CEPEJ spreadsheet", and the nomenclature proposed for Dashboard III, at a more advanced stage of JUSTAT implementation is very close to that used in the CEPEJ spreadsheet, also a detailed table, in which each case category is assigned the indicators of the corresponding statistical reports, being present. Only an adjustment of this table shall be required for JUSTAT needs.

Methodological recommendations for the use of the dashboard

The analysis of the structure of the stock of cases submitted to be examined by the courts of law, the courts of appeal and the Supreme Court of Justice can be useful from various points of view, including to know which social reports generate the most stress on the judiciary. The evolution of the indicators contained in Dashboard III over a period of 3-5 years may provide suggestions on the requirement to change the composition of the courts of law, of the specialization of judges or of court staff, etc.

Examples of graphic presentation and data search/visualization options

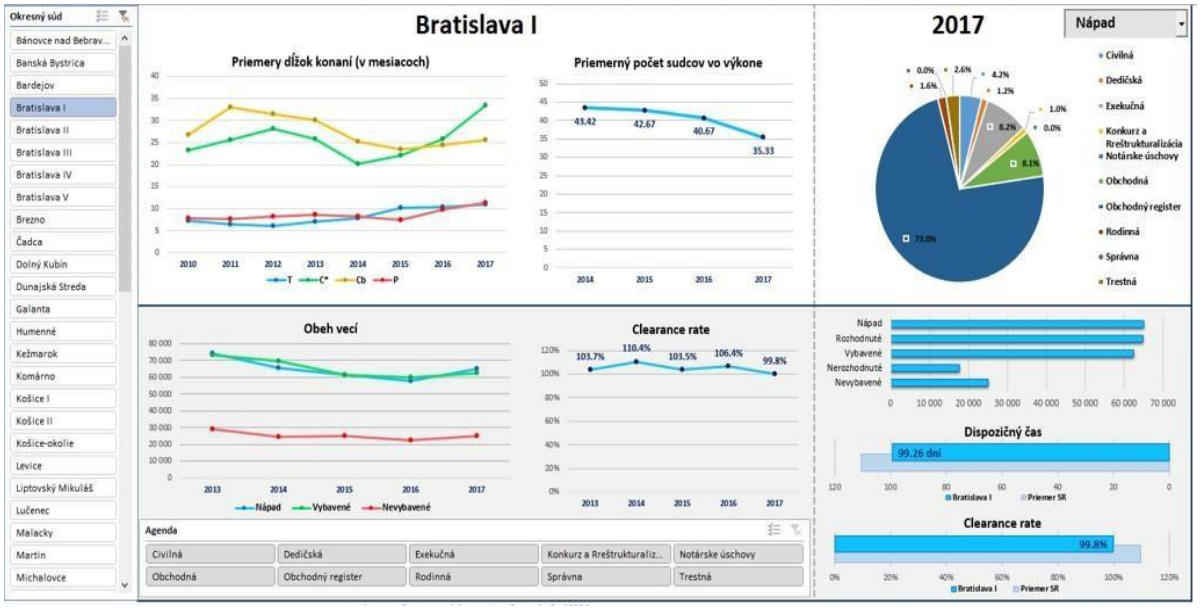


Figure 17.7 - Example of graphic representation

Examples of diagrams for DB III (source: Guide for the implementation of pre-selected CEPEJ tools in the courts of law of the Republic of Moldova and activity reports of the CEPEJ pilot courts):

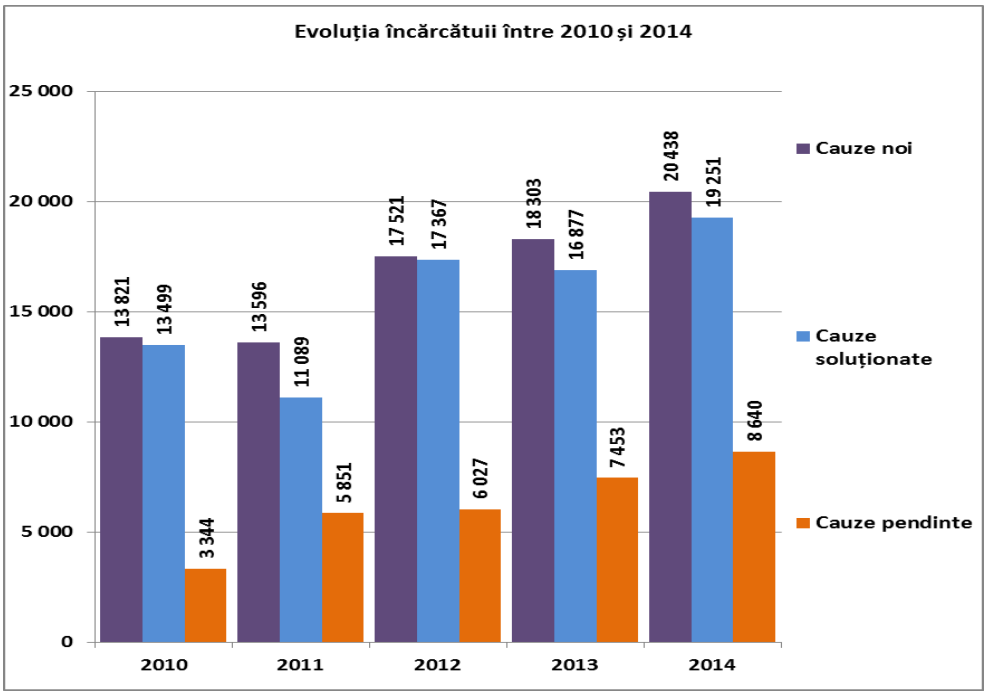


Figure 17.8 - Example of graphic representation 2

Evolution of the case load between 2010 and 2014
Cauze noi = New cases
Cauze soluționate = Resolved cases
Cauze pendinte = Pending cases

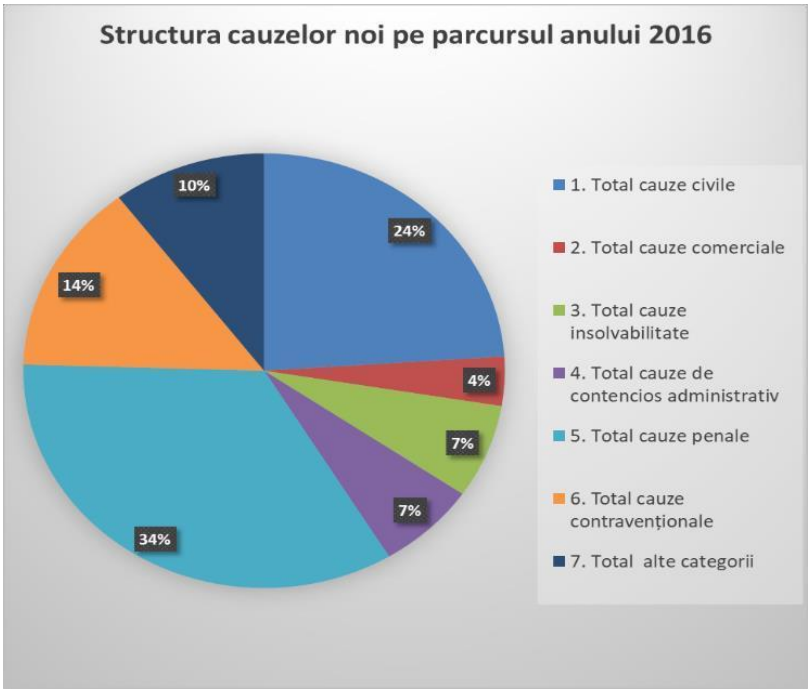


Figure 17.9 - Example of graphic representation 3

Structure of new cases during 2016

1. *Total civil cases*
2. *Total commercial cases*
3. *Total insolvency cases*
4. *Total administrative contentious cases*
5. *Total criminal cases*
6. *Total contraventional cases*
7. *Total other categories*

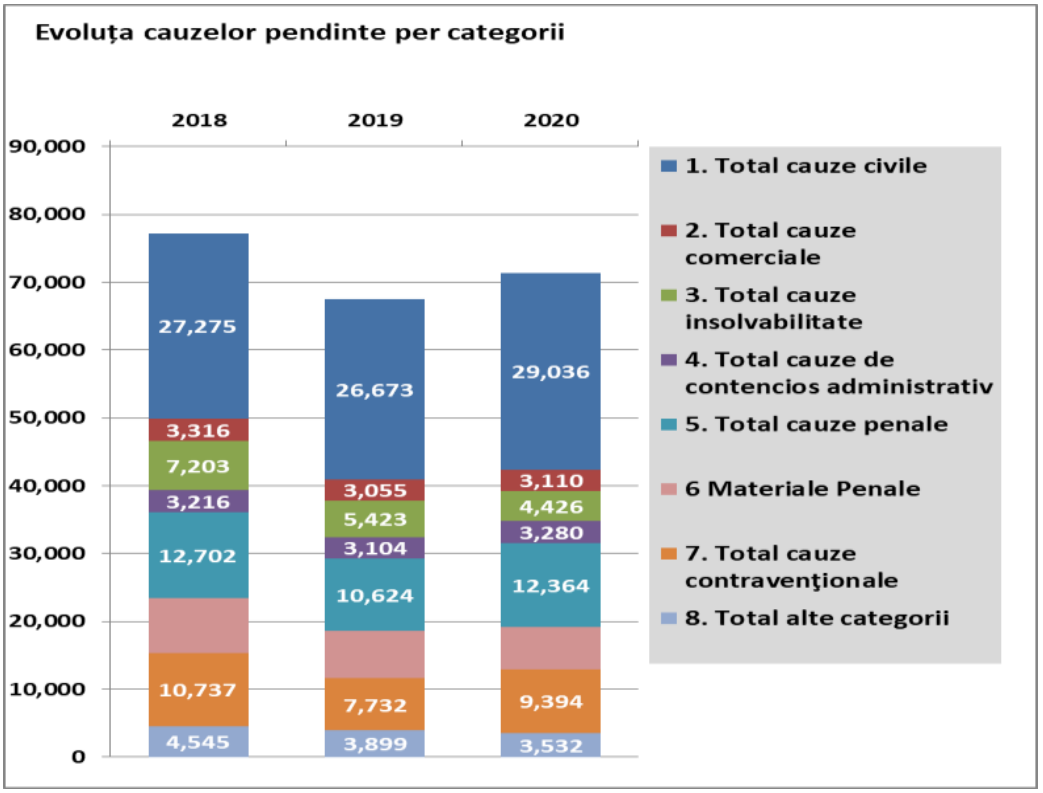


Figure 17.10 - Example of graphic representation 4

Evolution of pending cases per categories

1. *Total civil cases*
2. *Total commercial cases*
3. *Total insolvency cases*
4. *Total administrative contentious cases*
5. *Total criminal cases*
6. *Criminal material*
7. *Total contraventional cases*
8. *Total other categories*

17.2.4. Dashboard IV: Effectiveness of case examination in the courts of law

The dashboard on the effectiveness of the examination of cases in the courts of law provides an overview at national level, but also detailed information for each individual court, as regards the capacity of the judiciary and of its courts to cope with the influx of cases, based on the data on the number of registered cases and the results of the activity of the courts during a closed period. This dashboard shall facilitate the analysis of data in a chronological perspective and the comparison of the results of different courts, in order to identify significant trends or practices that seriously influence the effectiveness of courts.

The dashboard on the effectiveness of the examination of cases in the courts of law shall contain the following KPIs:

1. Rate of case resolution (RCR);
2. Rate of variation of the stock of pending cases (CR)
3. Estimated duration of the liquidation of the stock of pending cases (DT)
4. Duration of pending cases (DPC)

5. Duration of examined cases (DEC) and/or Average duration of cases examined (ADCE);

Examples of graphic presentation and data search/visualization options for DB IV (for details see source: CEPEJ Handbook):

Figure 17.11 - Example of graphic representation 1

Figure 17.11 - Example of graphic representation 2

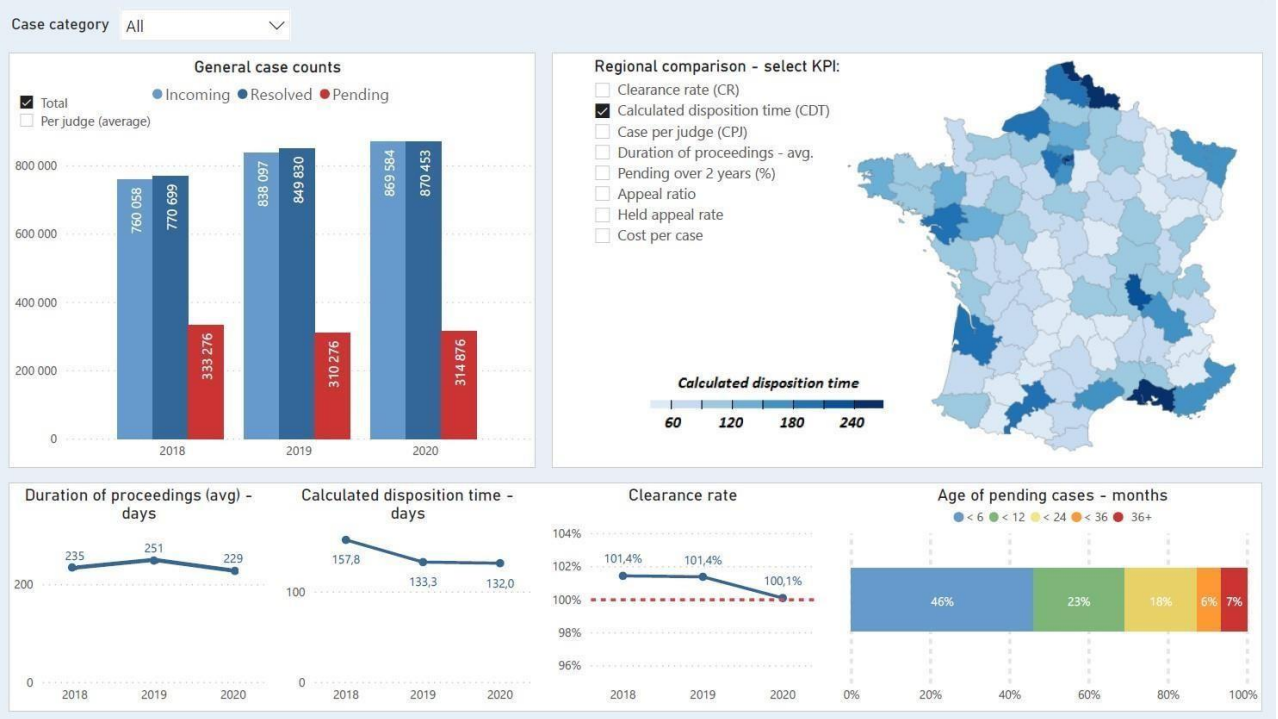


Figure 17.12 - Example of graphic representation 3

KEY PERFORMANCE INDICATOR: Rate of case resolution (RCR)

Proposed definition and calculation formula

The Rate of case resolution reflects the percentage of cases resolved out of the total volume of cases pending before the courts of law, during a reference period. This indicator evaluates how the court copes with the workload. Like most other KPIs, RCR can be used at the level of the judiciary as a whole, but also at the level of a court, of an office/college/panel/judge).

The RCR reflects the ratio of the pending cases at the beginning of a period and incoming (new) cases to cases resolved during the reference period, expressed as a percentage.

RCR (%) = (A/(B+C)) X 100, where:

A = Number of cases resolved by the court during the reference period;

B = Number of cases registered in court during the reference period;

C = Number of cases pending in court at the beginning of the reference period.

Cases suspended at the beginning of the reference period shall not be assigned to the number of cases pending in court at the beginning of the reference period. Cases recorded and suspended during the reference period shall be assigned to

the number of cases registered in court during the reference period. Cases suspended during the reference period shall not be assigned to the number of cases resolved.

Methodological recommendations on the use of the indicator

The RCR indicator is traditionally used in the national judicial system. Therefore, this indicator is uniformly understood and interpreted by the representatives of the courts of law and the judicial administration of the Republic of Moldova. At the same time, for an "outside" observer, this indicator raises interpretation challenges. For example, the data of the Statistical Sheet of District Courts (justice.md) indicate that in 2019 the courts demonstrated a resolution rate of cases between 88.51% (Comrat Court of Appeal) and 62.47% (Comrat District Court). These data do not clearly reflect that one of these courts had a more efficient activity in 2019. The difference in percentage may be due to a disproportionate backlog of cases at the end of 2018, at the Comrat District Court. Likewise, the "high" result at the Comrat Court of Appeal may be due to a low number of cases, or an efficient activity in 2018. These deficiencies are less characteristic for the "Rate of variation of the stock of pending cases" indicator.

The RCR indicator shall be thoughtfully analysed. In particular, it is necessary to know the evolution of this indicator in the courts of law, over the course of several years. Therefore, it is relevant to compare the evolution of this indicator in each individual court, over the last 3-5 years (the dynamics of the indicator) and with the national median/average.

Example of diagram for the RCR (source: Statistical sheet of judges (justice.md))

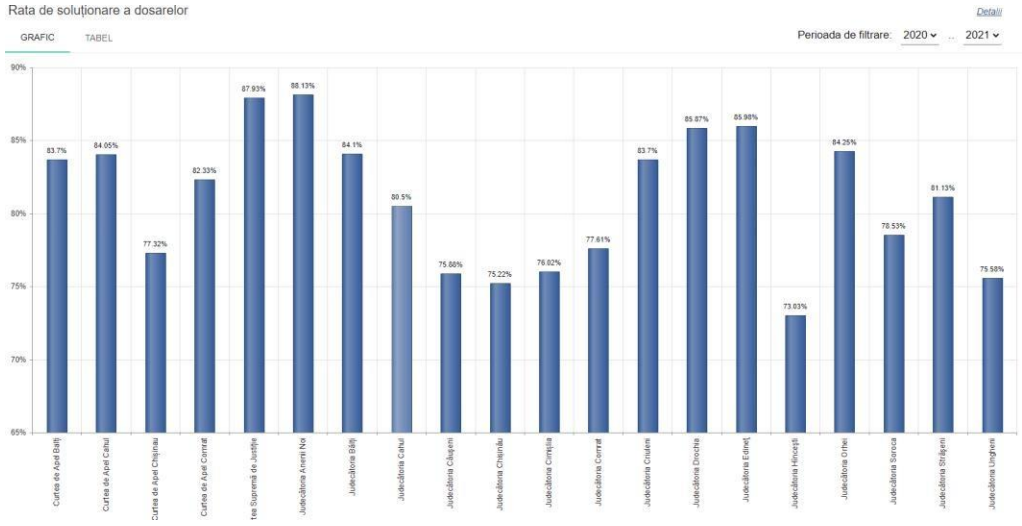


Figure 17.13 - Example of RCR diagram

KEY PERFORMANCE INDICATOR: Rate of variation of the stock of pending cases (CR)

Proposed definition and calculation formula

The Rate of variation of the stock of pending cases (CR) is the ratio of cases resolved during a reference period to new cases registered during the same period, expressed as a percentage.

CR (%) = (A/B) X 100, where:

A = Number of cases resolved by the court during the reference period;

B = Number of cases registered in court during the reference period.

Cases suspended during the reference period shall not be assigned to the number of resolved cases. Cases registered and suspended during the reference period shall be assigned to the number of cases registered in court during the reference period.

The data in the ICMP (accessible through the BI Reports menu) ensures the calculation of this indicator, including for different categories of cases. The statistical sheet of the courts (justice.md) does not provide details (for this indicator or for others) on different categories of cases. JUSTAT shall contain, even if only in the perspective of the implementation in stages, the detailing in different dashboards of the main categories of cases. One of the challenges also faced by the CEPEJ pilot courts in 2016-2017 was related to the classification of cases, in order to analyse the performance of the courts. Selecting the main categories of cases to be monitored on a long-term and on a uniform basis for all courts is difficult. The number of categories of cases monitored for the purpose of analysing the performance of the judiciary and the courts cannot be too large, as the feasibility of a comprehensive, useful and cyclical analysis decreases with the number of less important details added to this exercise. For a list of recommended case categories, see the proposals for DB III.

Methodological recommendations on the use of the indicator

The CR indicator assesses the ability of the judiciary or court to manage and cope with the current influx of cases. CR equal to or close to 100% indicates the ability of the system or a court to resolve approximately the same number of cases as the number of cases registered during the reference period. A rate of variation of the stock of pending cases above 100% indicates the ability of the system/court to examine more cases than received during the last period, thus reducing the pending stock. Finally, if the number of registered cases is higher than the number of examined cases, the CR will fall below 100%. When the CR falls below 100%, the number of

unresolved cases, at the end of the reporting period, will increase compared to the number of unresolved cases, at the beginning of the reporting period.

From the analysis of the CR, conclusions can be inferred as to:

- whether the system or the court manages to cope with the volume of cases (CR constantly lower or well below 100% is an alarm signal);
- whether there have been periods when the CR has shown significant positive or negative fluctuations, which would make it possible to determine to which circumstances or practices of the court these fluctuations are due;
- the categories of cases that show significant fluctuations in the CR and therefore may require special attention;
- when analysed for a longer period, the CR indicator can facilitate the identification of important trends by comparing the performance at the level of different courts, categories of cases, etc.

Example of diagram for the CR (source: Guide for the implementation of pre-selected CEPEJ tools in the courts of law of the Republic of Moldova):

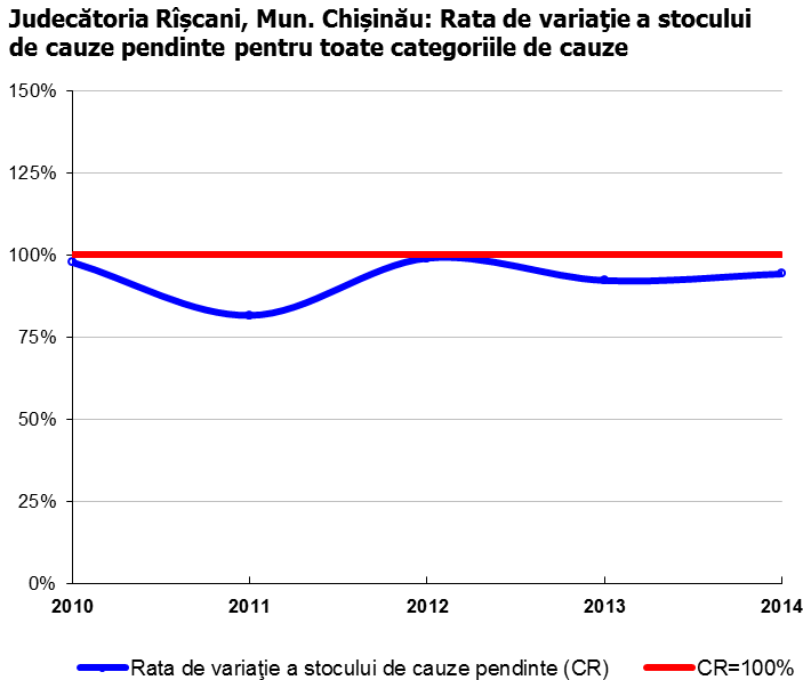


Figure 17.14 - Example of CR diagram

Rîșcani District Court, Chișinău Mun: Rate of variation of the stock of pending cases for all categories of cases

KEY PERFORMANCE INDICATOR: Estimated duration of the liquidation of the stock of pending cases (DT)

Proposed definition and calculation formula

The Duration of the liquidation of the stock of pending cases indicator determines the number of days required for the resolution of a certain category of cases. The number of 365 days a year is divided by the number of resolved cases divided by the number of unresolved cases at the end of the year, so that this indicator can be expressed in number of days. Consequently, it can also be said that DT measures the time required to resolve a type of cases in a judicial system/court.

DT (days) = (B/A) x 365 or 365/(A/B), where:

365 is the number of days in a year

A = Number of files resolved during a period of time

B = Number of unresolved court cases (pending at the end of a reference period).

The data in the ICMP (accessible through the BI Reports menu) ensures the calculation of this indicator.

Methodological recommendations on the use of the indicator

The Estimated duration of the liquidation of the stock of pending cases is of interest because it is an indicator of a time interval. For example, an extension of DT from 57 days to 72 days is easy to perceive. This conversion in days is also relevant to report (compare) the duration of examination of cases in a judicial system/court to the standards established for the duration of the proceedings, or the total reasonable duration.

DT does not provide an estimate of the average duration of the examination of cases. For example, if the DT for a category of cases is estimated at 60 days, one concrete case in that category could be resolved in 15 days, and another in 75 days or even later. In order to determine the average duration to resolve different categories of cases, a full analysis of the ICMP data would be required.

From the analysis of the DT, conclusions can be inferred as to:

- how the volume of cases has evolved and the productivity of the courts, including whether the courts are able to cope with the influx of cases in the short and medium term (comparing DT for a period of 3-5 years);
- how the DT has evolved for the entire volume of cases and for specific categories;
- which categories of cases have the most significant fluctuations in DT and therefore could need special attention;
- indirectly, DT provides a clue to one of the most frequently asked questions in the judicial system - what is the “predictable” duration of proceedings;

- whether there have been periods when the DT has shown significant positive or negative fluctuations, which would make it possible to determine to which circumstances or practices of the court these fluctuations are due etc.

The use of CR and DT in judicial statistics is widespread, and these are key indicators applied by the CEPEJ to the evaluation of European judicial systems. It is recommended to interpret these two indicators "in pairs", for a more coherent perception of judicial performance.

Example of diagram for the DT (source: Guide for the implementation of pre-selected CEPEJ tools in the courts of the Republic of Moldova):

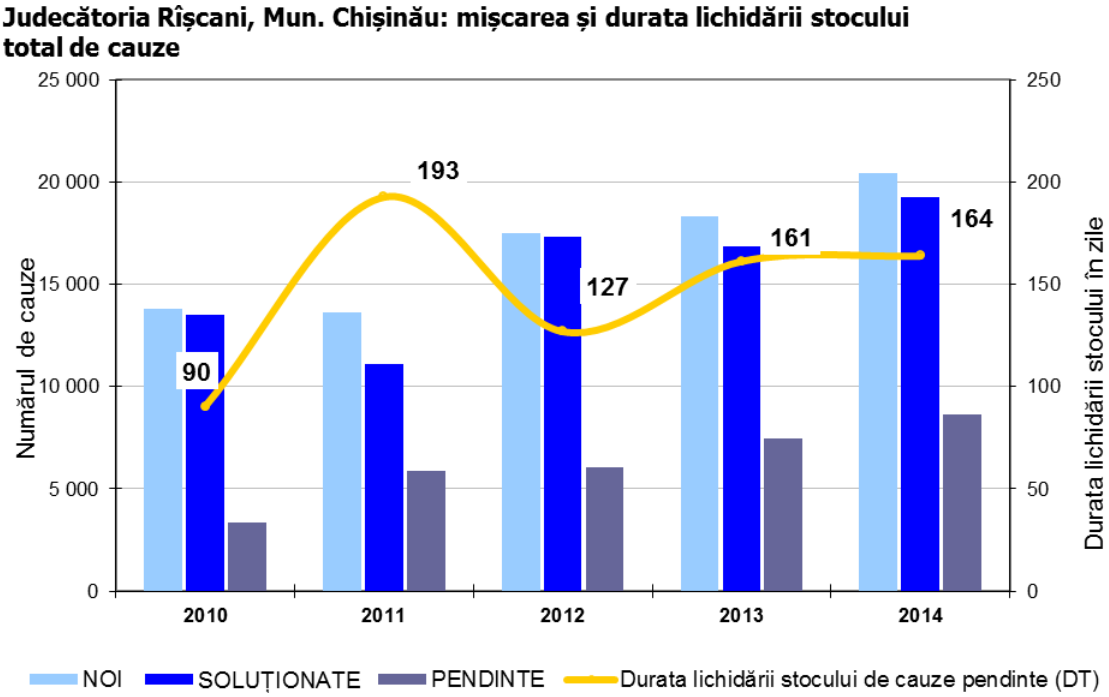


Figure 17.15 - Example of DT diagram

Rîșcani District Court, Chișinău Mun: flow and duration of liquidation of the total stock of cases
Numărul de cause = Number of cases
Durata lichidării stocului în zile = Duration of liquidation of the stock in days
Durata lichidării stocului de cause pendinte = Duration of liquidation of the stock of pending cases

KEY PERFORMANCE INDICATOR: Duration of pending cases (DPC)

Proposed definition and calculation formula

The Duration of pending cases (DPC) shall reflect the number or percentage of cases pending at a certain time before the judicial system or court, related to certain time periods (number of years or months days) and calculated from the date of registration of the case in court. The name "age of pending cases" is often used to refer to this indicator. A calculation formula is not applicable to this indicator, and data visualization is possible on

the basis of a table indicating the time periods and the number or percentage of cases, the pending of which before the court corresponds to the respective periods.

The data in the ICMP (accessible through the BI Reports menu) ensures the calculation of this indicator.

Methodological recommendations on the use of the indicator

When cases are pending in a court of law for more than two years, the risk of a breach of the requirements of Article 6 of the ECHR on the right to a fair and within a reasonable time, increases significantly. Therefore, even with other very good performance indicators (such as RCR, CR, DT), a judicial system/court may be responsible for excessive delays in a number of statistically insignificant cases, but very important in view of compliance with the reasonable time limits for the examination of cases. In order to avoid such situations, it is necessary to constantly monitor, even by public exposure, the duration of the pending of cases before the courts, which have the obligation to take measures to resolve the "old" cases, starting from the oldest ones.

The DPC indicator is not intended to reflect the volume of court cases, but the age of pending cases. It will reflect the situation on a certain date (for example, on December 31st of the respective year). Therefore, only the cases that are still pending before the court at this date are included in that table or diagram, which means that many cases that were registered during that year, but were also examined or otherwise removed prior to December 31st, shall not be reflected in this table.

The DPC indicator shall be interpreted with caution. Situations in which the length of the case before the court is dictated exclusively by the conduct of the parties or by circumstances beyond the control of the judge, are not excluded. For example, the suspension of proceedings to await the outcome of a related case or to determine the constitutionality of a legal act is acceptable in principle, provided that the suspension is granted only for the purpose of causing as few delays as possible. On the other hand, general delays caused by the workload of the courts can only be accepted as long as they are not extended over time and the authorities take reasonable steps to give priority to urgent and important cases.

Examples of graphic presentation for DPC (source: activity reports of CEPEJ pilot courts):

Numărul de cauze înregistrate:									Grand total
Tipul de cauze	Mai puțin de 1 an	% din total	Între 1 și 2 ani	% din total	Între 2 și 5 ani	% din total	Mai mult de 5 ani	% din total	
1. Total cauze civile	2364	35,30%	320	4,78%	257	3,84%	44	0,66%	
2. Total cauze comerciale	583	8,71%	107	1,60%	11	0,16%	2	0,03%	
4. Total cauze de contencios administrativ	342	5,11%	26	0,39%	15	0,22%	1	0,01%	
5. Total cauze penale	898	13,41%	197	2,94%	154	2,30%	3	0,04%	
6. Total cauze contravenționale	1085	16,20%	45	0,67%	0	0,00%	0	0,00%	
7. Total alte categorii	215	3,21%	25	0,37%	3	0,04%	0	0,00%	
Totalul calculat de cauze	**5487**	81,93%	**720**	10,75%	**440**	6,57%	**50**	0,75%	**6697**

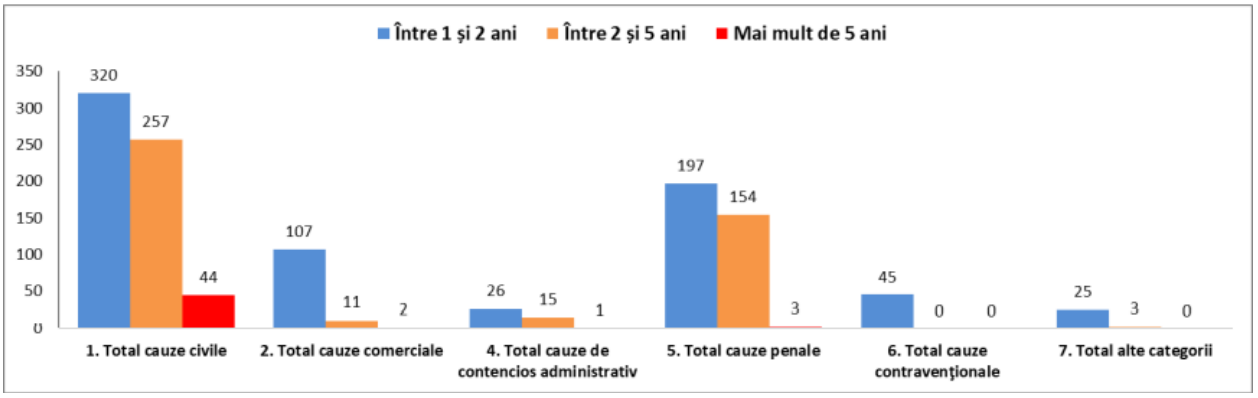


Figure 17.16 - Examples of DPC diagrams

Number of cases investigated
Tipul de cauze = Type of cases
1. Total civil cases
2. Total commercial cases
4. Total administrative contentious cases
5. Total criminal cases
6. Total contraventional cases
7. Total other categories
Totalul calculat de cauze = Total cases calculated
Mai puțin de 1 an = Less than 1 year
% din total = % from total
Între 1 și 2 ani = Between 1 and 2 years
Între 2 și 5 ani = Between 2 and 5 years
Mai mult de 5 ani = More than 5 years

KEY PERFORMANCE INDICATOR: Duration of examined cases (DEC) and/or Average duration of cases examined (ADCE)

Proposed definition and calculation formula

The duration of examined cases (DEC) reflects the number or percentage of cases resolved over different time periods. Being methodologically close KPI Duration of pending cases (DPC), a calculation formula is also not applicable to this indicator, and data visualization is possible based on a table indicating the time periods and the number or percentage of cases, whose duration of examination corresponds to the respective periods. Unlike DPC, DEC applies to a period of time - the duration of the pending before the court of the cases examined, during the reference period, will be analysed.

The Average duration of cases examined (ADCE) is calculated by dividing the sum of the duration of all completed (resolved) cases during the reference period, by the number of these files.

ADCE (days) = B/A, where:

A = Sum of the duration of all cases completed (resolved) during the reference period

B = Number of cases completed (resolved) during the reference period

The information is available in ICMP, in the BI Reports module, as well as in the Detailed Case Record (excluding the period of suspension of the examination).

Methodological recommendations on the use of the indicator

These two indicators are complementary to DPC. If DPC serves to monitor the stock of work in progress and, respectively, is intended to prevent breaches of the reasonable time limit for examining cases, DEC and ADCE can only find some post-factum breaches, based on the statistical analysis of the age of the cases already examined, or to provide the litigant with an indication of the possible duration of the examination of a file in a certain category.

17.2.5. Dashboard V: Challenging of court decisions

Promptness is an important feature of the activity of a judicial system/courts, but ensuring a high quality of court decisions is no less important. The dashboard on challenging court judgements contains important information for the evaluation of the quality of justice. This dashboard shall facilitate the analysis of quality elements, but is not intended to assess the professionalism of judges. The rate of decisions contested by appeal/recourse is an indicator that should be interpreted with great diligence because, in certain circumstances, it can be applied as an indirect measure of the quality of decisions, assuming that lower quality judgements are more likely to generated the recourse to legal redress. Analysing data in chronological perspective and comparing the results of different courts will allow the identification of significant trends and practices that seriously influence the quality of court decisions.

The dashboard on challenging court decisions shall contain the following KPIs:
Call rate (RA);

1. Rate of appeals (RA);
2. Rate of cancelled decisions in relation to the number of issued decisions (RCD);
3. Rate of amended decisions in relation to the number of issued decisions (RAD);

KEY PERFORMANCE INDICATOR: Rate of appeals in relation to the number of issued decisions (RA)

Proposed definition and calculation formula

The Rate of appeals is the rate expressed as a percentage of court judgements / decisions contested by appeal/recourse, in relation to the total number of judgements / decisions issued during a certain period of time.

RA (%) = (A/B) X 100, where:

A = Number of decisions or judgements challenged by appeal or recourse during the reference period

B = Total number of decisions or judgements issued during the reference period.

Data is available in the ICMP, in the BI Reports menu, and in the results of the examination that can be accessed in each case.

Methodological recommendations on the use of the indicator

The frequency of challenges against decisions or judgements is an indicator to be "treated with care". The appeal is not always based on issues related to error or poor decision-making in the lower court, but may be the result of tactical behaviour on the part of one party, regardless of the quality of the decision. Appeal cases entered only to cause delays are an example in this regard. CEPEJ experts are cautious and argue that the rate of appeal is not in itself an indicator of quality. On the other hand, they support the analysis of that indicator and claim that a strong difference in the value of the indicator between courts, or in chronological perspective is at least an indication of an anomaly.

The increase in the number of appeal applications may inform decision-makers on the need to take action to resolve the issue (for example, the adoption of informative notes on legal practice or professional training efforts). RA can also be used to evaluate and plan human resources needs8. Thus, if the number of appeal applications increases compared to a previous stage, it is clear that steps need to be taken to strengthen the appellate court's ability to cope with the increased influx of applications.

KEY PERFORMANCE INDICATOR: Rate of cancelled decisions in relation to the number of issued decisions (RCD)

Proposed definition and calculation formula

The rate expressed as a percentage of court decisions cancelled or quashed by hierarchically superior courts, in relation to the total number of decisions issued in a given period of time.

RCD (%) = decisions or judgements cancelled by the court of appeal or recourse/total decisions or judgements issued x 100%.

Data is available in the ICMP, in the BI Reports menu, and in the results of the examination that can be accessed in each case.

Methodological recommendations on the use of the indicator

In assessing the data of this indicator, it is important to note that the success of the appeal/recourse may not be related to the quality of the original judgement, but may be based on other considerations, such as a different interpretation of the new law by the higher court, additional information submitted by the participants, the quality of the pleadings, the participation of the lawyer in the hearing, etc. As a result, CEPEJ experts recommend the analysis of this indicator together with other information, which would supplement the information content needed to be evaluated in terms of verifying the quality of the act of justice.

The information provided by the DB V indicators may also be useful to the representatives of the National Institute of Justice who develop continuing training programs for judges, registrars and legal assistants. Likewise, the information provided may be useful to the Plenum of the Supreme Court of Justice in whose jurisdiction the task of generalizing judicial practice is assigned.

KEY PERFORMANCE INDICATOR: Rate of amended decisions in relation to the number of issued decisions (RAD)

Proposed definition and calculation formula

The rate expressed as a percentage of court decisions amended by the hierarchically superior court, in relation to the total number of decisions issued during a certain period of time.

RAD (%) = decisions or judgements amended by the court of appeal or recourse/total decisions or judgements issued x 100%.

Data is available in the ICMP, in the BI Reports menu, and in the results of the examination that can be accessed in each case.

Methodological recommendations on the use of the indicator

The analysis of the information presented by RAD may lead to the identification of certain issues such as non-uniform practice of applying the legal framework, insufficient knowledge or experience in interpreting certain categories of rules, etc. Such conclusions can be extended on the basis of a complex analysis of the data referring to categories of cases, courts, periods in which certain decisions were issued. Thus, if we find that, as a result of legislative changes, RAD has changed, decision makers should probably focus their efforts on training judges on the target subject.

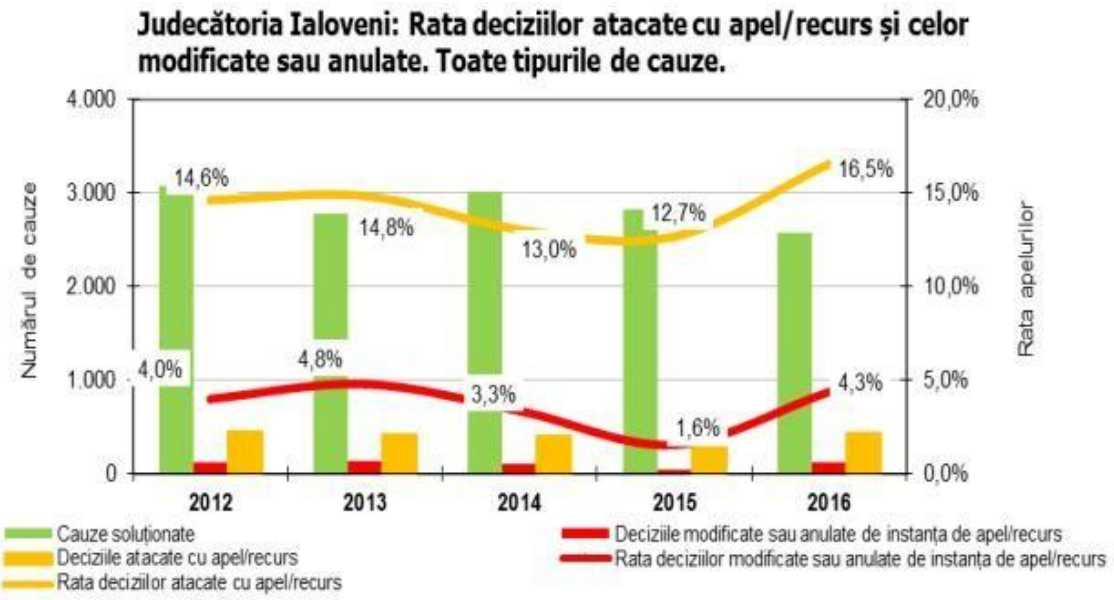
In order to increase the quality of the findings, it is important that DB V rates be analysed in tandem. The observation of the values regarding the number of challenges, together with the result thereof - either the annulment or amendment, or the confirmation of the decision or judgement adopted by the lower court - provides useful elements for the analysis of quality. Thus, for example, a higher appeal rate in the case of a stable rate of amended or reversed judgements may mean a reduction in concern for clear and easy-to-understand court judgements or for explaining litigants' decisions.

Examples of graphic presentation and data search/visualization options

Information on DB V indicators can be generated by the graphical or tabular presentation of information and percentage for a particular court (indicating the national median or average), or level of jurisdiction. Each court level shall be assigned a representative colour in the Dashboard.

- Bar chart for the individual court when visualising the indicator for different categories of cases (indicating the national median or average). A distinct colour shall be assigned to each category of cases.
- Bar chart or line chart for the individual instance when the indicator is visualised in chronological perspective (indicator dynamics).
- Bar chart (or percentage on the map of divisions) when multiple courts are visualised in comparative form (by indicating the national median or average).

Examples of graphic presentation for RA, RCD and RAD (source: activity reports of CEPEJ pilot courts and CEPEJ Handbook):



Ialoveni District Court: Rate of decisions challenged with appeal/recourse and of those amended or reversed. All case types

Numărul de cauze = Number of cases
Rata apelurilor = Rate of appeals
Cauze soluționate = Cases resolved
Deciziile atacate cu apel/recurs = Decisions challenged with appeal/recourse
Rata deciziilor atacate cu apel/recurs = Rate of decisions challenged with appeal/recourse
Deciziile modificate sau anulate de instanța de recurs = Decisions amended or reversed by the court of appeal/recourse
Rata deciziilor modificate sau anulate de instanța de recurs = Rate of decisions amended or reversed by the court of appeal/recourse

Figure 17.17 - Example of diagram

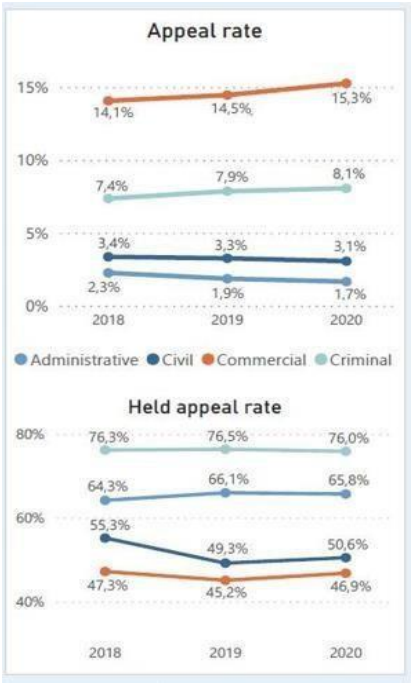


Figure 17.18 - Example of diagram

17.2.6 Dashboard VI: Ratio of human and financial resources to the results of courts of law

The dashboard on the ratio of human and financial resources to the results of the courts of law will facilitate the analysis of the provision of resources to the judicial system, but also the assessment of the uniformity and fairness of the distribution of resources within the system. This dashboard provides an overview, by system and by individual courts, of the ratio of human resources and budgets capitalised on to results, in terms of the number and complexity of the cases examined. The dashboard will facilitate the analysis of data in a chronological perspective and the comparison of the results of different courts, in order to identify the evolution of needs and productivity, trends or practices that influence the efficiency of the courts.

As indicated in the Final Report on the Implementation of Selected CEPEJ Tools in Pilot Courts of the Republic of Moldova (CEPEJ-COOP (2017) 3, CEPEJ experts, many of whom are current or former judges, agree that the efficiency of courts is not a goal in itself, but one of the means of better administration of justice and ensuring the rule of law. A transparent and efficient way of organising the public service, in general, but especially the judiciary, contributes to reducing the phenomenon of corruption and increasing public confidence in the judiciary. The effectiveness, efficiency and quality of the activity of the courts or the judiciary as a whole should be examined simultaneously. When the focus is only on quality, in the long term, public access and trust are threatened due to rising costs and delays. Therefore, the quality and efficiency or "productivity" of the judiciary should be weighed.

The dashboard on the reporting of human and financial resources to the results of the courts will contain the following KPIs:

1. Case load per judge (ECLJ and CLJCS);
2. Number of cases examined per judge (CEJ);
3. Number of cases examined per employee (CEE);
4. Sum of complexity degrees of the cases examined per judge (CD/CEJ)
5. Sum of complexity degrees of the cases examined per employee (CD/CEE)
6. Cost per cause (CPC);
7. Cost of complexity degree (CCD);

KEY PERFORMANCE INDICATOR: Case load per judge (ECLJ and CLJCS)

Proposed definition and calculation formula

The effective case load per judge reflects the number of cases pending before the court during a reference period compared to the number of judges who have effectively worked in court during that period. The number of judges who have actually worked in a court is determined as an annual average, taking into account the length of time when some magistrates have not effectively worked for various reasons (seconded and suspended magistrates, maternity leaves and sick leaves longer than 30 calendar days during the reference period).

The case load per judge, according to the organisational chart, reflects the number of cases pending before the court during a reference period relative to the total number of judge positions, provided in the organisational chart of the courts.

ECLJ (number of cases) = total number of cases in court proceedings during the reference period / number of judges (FTE) during the reference period.

CLJCS (number of cases) = total number of cases in court proceedings during the reference period / number of judges according to the organisational chart during the reference period.

The **ICMP** provides information on cases in court proceedings and the number of judges (FTE) by accessing the BI Reports menu.

Methodological recommendations on the use of the indicator

The two indicators reflect the "pressure" to which judges are subjected by the volume of cases pending before the court. If the value of these indicators varies substantially from one court of the same level to another, this will most likely be due to an unfair distribution of judges' positions among judges, or other anomalies. It is clear that the combination of these two indicators aims to highlight the problem of discrepancies between the organisational chart and the reality of human resources in courts. If there is a significant discrepancy between the ECLJ and the CLJCS, this will be due either to a problem related to the selection and appointment of judges, for example delays in the proceedings, or to the long absence of several court judges. Often the difficult and lengthy procedures for selecting and appointing judges, as the needs of the courts are not anticipated, seriously jeopardise the activity of the courts. It will be useful to compare the value of individual court indicators with the average calculated per level of jurisdiction.

KEY PERFORMANCE INDICATOR: Number of cases examined per judge (CEJ)

Proposed definition and calculation formula

The number of cases examined per judge is the average number of cases examined by each of the judges who effectively activated (FTE) in court during a reference period.

CEJ (number of cases) = The total number of cases examined in court during a given period of time / the number of judges who effectively activated (FTE) during the reference period.

ICMP provides information on the cases examined and the number of judges (FTE).

Methodological recommendations on the use of the indicator

This indicator can be used by decision makers in the system with a view to developing the staffing policy. However, the indicator should be interpreted in conjunction with other information, namely: the Rate of variation of the stock of pending cases; the complexity of the cases; the actual case load per judge, etc. Thus, the indicator can also be used to estimate the number of judges needed to be trained in court, but also to estimate the number of non-judicial staff needed by the court at a certain stage. It will be useful to compare the value of the displayed indicator for individual courts with the average calculated per jurisdiction level. The joint analysis of the ECLJ and CEJ indicators will be useful in evaluating the balance between the flow of cases and the resources allocated to courts, in particular the number of judges working in the respective court.

The above mentioned indicators will have a greater analytical and managerial potential if combined with similar indicators per court employee (or by the categories of employees who directly contribute to the examination of cases - registrars and assistant judges). By analysing such information, managers of the judicial system could improve staffing policies.

KEY PERFORMANCE INDICATOR: Number of cases examined per employee (CEE)

Proposed definition and calculation formula

The number of cases examined per employee is the result of dividing the total number of cases examined in a given period of time in the court by the total number of employees (excluding judges) who effectively activated (FTE) during the reference period.

CEE (number of cases) = The total number of cases examined in a court. Total number of employees (excluding judges) who effectively activated (FTE) in court during the reference period.

ICMP provides information on the cases examined and the number of employees. In order to calculate this indicator, it is necessary to complete the nomenclature of court employees.

Methodological recommendations on the use of the indicator

CEE will be similarly analysed and jointly with CEJ. The correlation of these indicators with court staff rates per judge (RSJ and RARJ) and with cost-per-case (CPC) and cost-of-complexity (CCD) indicators may generate arguments in favour of a particular structure of court of law human resources. For example, in order to counteract the increase in the volume of cases, it may be more effective to supplement the number of legal assistants per judge than to increase the number of judges.

KEY PERFORMANCE INDICATOR: The Sum of complexity degrees of the cases examined per judge (CD/CEJ)

Proposed definition and calculation formula

The Sum of complexity degrees of the cases examined per judge is the result of dividing the sum of the complexity degrees of all cases examined during a certain period of time in the court by the number of judges who effectively activated (FTE) in the court during the reference period.

CD/CEJ (number of complexity degrees) = the sum of the complexity degrees of all cases examined in court / the number of judges who effectively activated (FTE) during the reference period.

The data on complexity degrees, used in the calculation of this indicator, shall be recorded automatically, in accordance with the Regulation on establishment of uniform levels of complexity for civil, criminal and contraventional cases at the national level, approved by the SCM decision. The data are available in the ICMP for each type of case and for the sum of cases, and in the Report on the current state of complexity per judge and on the basis of three types of cases - civil, criminal, contraventional.

Methodological recommendations on the use of the indicator

In connection with the existence and widespread use of the system for determining the complexity of files/cases, it is appropriate to expand and improve

the statistical tools that allow the comparison of the workload and the results generated by different courts. Of course, cases in different categories (but often in the same category) involve different levels of complexity and require a different amount of effort and, especially, judicial time, to be examined. For this reason, the comparison of the number of cases per judge or of the cost per case is to be relativised and contextualised, as these indicators disregard the variable complexity of cases and the uneven structure of the stock of cases in different courts. In the Republic of Moldova, there is the possibility to also take into account the level of complexity of the files. Namely the complexity degrees, which are currently assigned and monitored in the ICMP, would allow comparisons to be made by more precise statistical methods, of the efficiency of the courts.

The concept of the financing of the judicial system approved by Parliament Decision no. 39 of 18.03.2010 provides for the implementation of objective and transparent regulations for establishing the operational budgets of the courts, in determined periods of time, in the light of the weighted analysis of the case load examined in each court of law, over a determined period of time. Such a weighted analysis will allow the streamlining of budget allocations, the comparison between courts of the workload performed, the establishment of the optimal volume of activity of a judge, the optimization and redistribution of judge and auxiliary staff positions within the system, but also a more equitable random distribution of the case load per judge, in different courts. According to the same concept, the weighted analysis of the case load shall be conducted both based on the number of cases examined and their complexity, given that the level of effort made by judges to examine cases differs from one case to another. Thus, JUSTAT will facilitate the weighted analysis of the case load in the judiciary and the information of decisions on the financing of courts.

The interpretation of the indicator will take into account the fact that, based on the SCM decisions, the workload of the judge is limited to less than 100% for certain categories of judges (for example, for president, vice-president of the court, member of the SCM College, etc.).

KEY PERFORMANCE INDICATOR: The Sum of complexity degrees of cases examined per employee (CD/CEE)

Proposed definition and calculation formula

The Sum of complexity degrees of the cases examined per employee is the result of dividing the sum of the complexity degrees of all cases examined during a certain period of time in the court by the total number of employees (except judges) who effectively activated (FTE) during the reference period.

CD/CEE (number of complexity degrees) = the sum of the complexity degrees of all cases examined in court / the total number of employees (except judges) who effectively activated (FTE) during the reference period.

Data is available in the ICMP. The amount of complexity of the cases per system / court is not available but can be calculated, the required settings being configured in the application.

Methodological recommendations on the use of the indicator

See recommendations on CEE and CD/CEJ indicators. Just as the Rate of court staff per judge (RSJ) is complemented by the Rate of assistants and registrars per judge (RARJ), the possible advantages of further calculation of the Sum of complexity degrees of the cases examined per assistants and registrars indicator will be examined (categories of personnel with direct attributions to the administration of the act of justice).

KEY PERFORMANCE INDICATOR: Cost per case (CPC)

Proposed definition and calculation formula

The cost-per-case indicator reflects the average value of the court's financial means, based on the budget executed for the reference period, "spent" for resolving a case.

CPC (MDL/per case) = Budget executed by the court during the reference period / Number of cases resolved in the same period.

Sources of information: The information related to the executed budget shall be selected from the program used for the financial management of the court (e.g. 1C Budget), and the statistical information on resolved cases is available in the ICMP. Unlike the budget used to calculate the Budget per 10 thousand inhabitants (DB I) indicator, the budget used to calculate this indicator will not include capital investments and single severance pay on dismissal from office or resignation of the judge, as well as/or exceptional allowances (e.g. in connection with temporary incapacity for work). These costs are erratic and often very costly, which could distort the indicator.

Methodological recommendations on the use of the indicator

In particular, through benchmarking and chronological perspective, the CPC indicator can provide information on the high, medium or low efficiency of any court, but a unique methodology needs to be applied. It is also recommended that the CPC be displayed with the indication of the median or national average.

The indicator reflects the average conventional cost of processing a single case. The cost per case creates a direct link between the costs incurred and the result obtained by the court. This indicator can also be useful to assess the effect of reforms, the profitability of new technologies, the impact of re-engineering professional practices, the training of staff or the implementation of good management practices. The analysis of this indicator can also contribute to the identification of inefficient procedures/aspects in the activity of the court.

Through the decisions of the SCM, in some courts, specialized panels are created for the examination of certain cases, and in the municipality of Chișinău, the specialisation is established for each office. This allows, in the future, that the calculation of the average cost per case be conducted in a disaggregated manner for each major category of cases - civil, criminal, contraventional.

KEY PERFORMANCE INDICATOR: Cost of complexity degree (CCD)

Proposed definition and calculation formula

The cost of complexity degree reflects the average value of the financial means of the court, based on the budget executed for the reference period, "spent" for each complexity degree from the sum of the complexity degrees of all cases examined by the court during the same period.

CCD (MDL/per complexity degree) = Budget executed by the court during the reference period / Sum of the complexity degrees of the cases examined by the court during the same period.

Data on the complexity degrees are available in the ICMP. The amount of complexity of the cases per system/ court is not available but can be calculated, the required settings being configured in the application. The same budget value shall be used as for the CPC indicator.

Methodological recommendations on the use of the indicator

See recommendations on CD/CEJ and CPC indicators.

Examples of diagrams showing the CEJ, CEE and CPC indicators (source: Guide for the implementation of pre-selected CEPEJ tools in the courts of law of the Republic of Moldova):

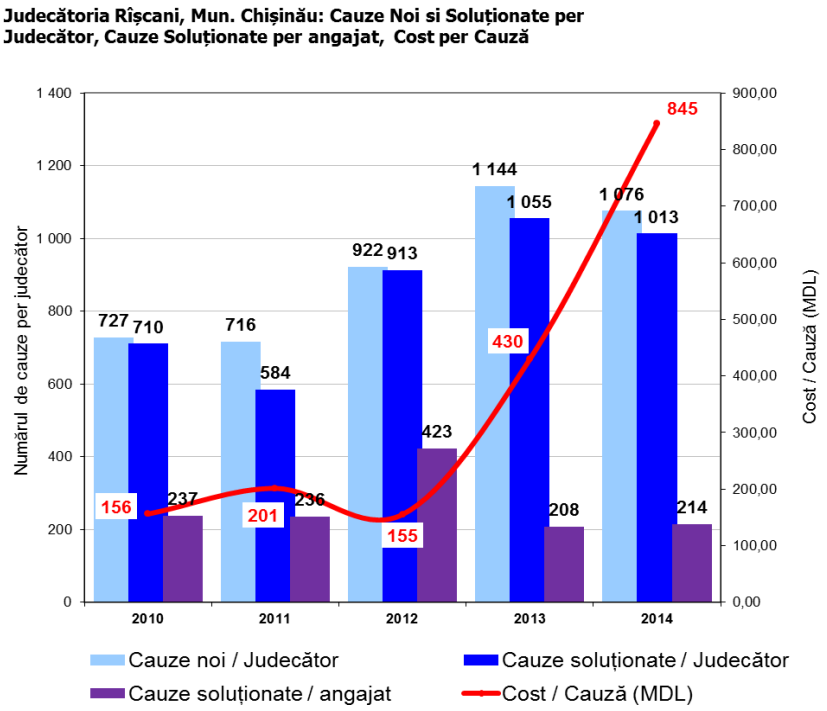


Figure 17.19 - Examples of diagrams

Rîșcani District Court, Chișinău Mun: New and resolved cases per judge, Resolved cases per employee, Cost per case

Numărul de cauze per judecător = Number of cases per judge
Cost / Cauză (MDL) = Cost / Case (MDL)
Cauze noi / judecător = New cases / judge
Cauze soluționate / angajat = Resolved cases / employee
Cauze soluționate / judecător = Resolved cases / judge
Cost / Cauză (MDL) = Cost / Case (MDL)

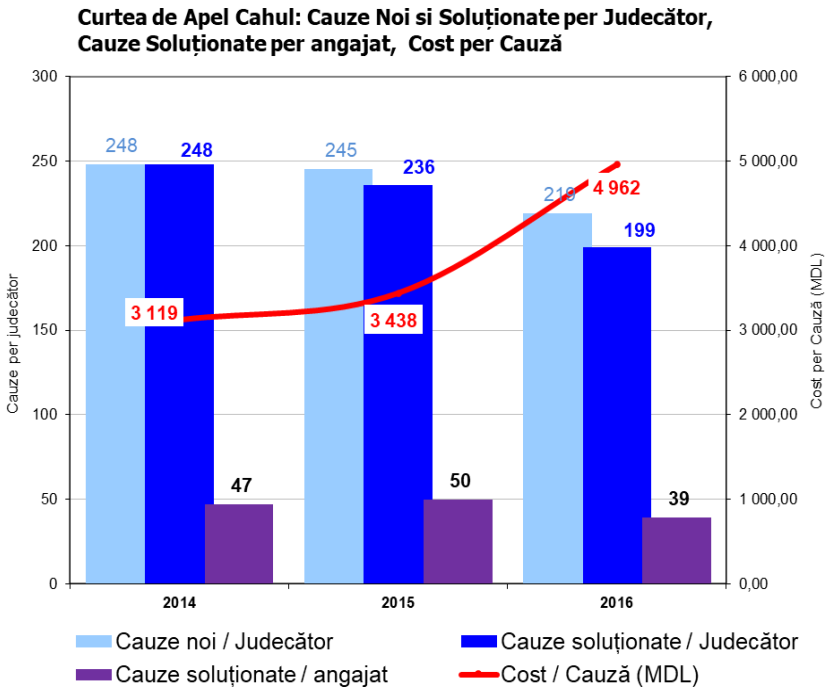


Figure 17.20 - Examples of diagrams

Cahul Court of Appeal: New and resolved cases per judge, Resolved cases per employee, Cost per case
Cauze per judecător = Cases per judge
Cost per Cauză (MDL) = Cost per Case (MDL)
Cauze noi / judecător = New cases / judge
Cauze soluționate / angajat = Resolved cases / employee
Cauze soluționate / judecător = Resolved cases / judge
Cost / Cauză (MDL) = Cost / Case (MDL)

XIX. SYSTEM INTERFACE

The Provider shall also prepare and submit to the Beneficiary up to 3 alternative versions of the system design. After selecting the version that suits the Beneficiary's preferences and adjusting it until the final acceptance of the Beneficiary, the graphic image of the web page design shall be converted into HTML code.

The design of the platform shall be attractive and intuitive, so as to present the information as clearly as possible and to open for users doors towards information resources in the most accessible way possible.

The platform shall have a clear structure and navigation, the information shall be arranged as intuitively as possible, according to the categories to which it belongs, with a presentable and easy to use interface, and shall have a responsive design to suit any device and format. Navigation elements shall be arranged so as to provide a single direction that is easily perceived by users.

The site interface shall be developed based on an original and pleasing design, optimized for categories of visually impaired users (minimum resolution 1024x768, fast loading, balanced multimedia elements, perfect compatibility with popular browsers and adaptive design for mobile devices and tablets).

The graphic presentation of the dashboards is of major importance. In order to develop the JUSTAT dashboards, the recommendations of the Handbook on court dashboards (CEPEJ(2021)8REV1)[6] must be applied.

In order to better organise the data in the limited space of the screen, first, the possible dependencies between different sets of performance indicators that can justify their arrangement on the same screen, side by side, to create a complete image and a continuous information flow, shall be identified.

Once the level of detail has been decided and the sets of performance indicators to be displayed in a single screen have been grouped, the information shall be arranged in aligned building blocks, with a coherent structure and simple and clear titles, leaving the majority of the space for the actual content. The arrangement into blocks shall ensure a natural flow of information, allowing users to find the data they are looking for, in the order and in the location to be expected. In this regard, and as a general rule, it is recommended to limit the number of blocks/graphics displayed in a screen to a maximum of 5-7, in order to ensure an efficient presentation that does not overwhelm the users. Below are three different layouts

[6] The Romanian translation of the Handbook on court dashboards (CEPEJ(2021)8REV1) shall be attached. See also https://rm.coe.int/cepej- 2021-8-handbook-on-court-dashboards-rom/1680a3d6a1

of the building blocks in a dashboard, taking into account that there is a wide variety of options.

Figure 18.1 - Building blocks

A well-designed dashboard is equipped with an efficient data filtering mechanism that allows users to focus on a defined group within a larger data set. This is performed through click filtering options, which determine the level of detail of each dashboard. As an example, below is a horizontal filtering toolbar, which consists of six filtering values available to users.

With regard to any DB or indicator integrated in JUSTAT, the possibility of applying the filtering criteria as follows below, shall be analysed:

FilterFilter per court	FilterFilter per year/period	FilterFilter per category
Display of information per system	Display of information per year	Display of information per category of employee
Display of information per type of court	Display of information per selected period	Display of information per category of cases
Display of information per court		
Display of information per level		
Display of information per office		

Table 18.1 - Filters

The user shall be able to select from the list those items that he/she wishes to be displayed (the possibility of simultaneous displaying of several items in the diagrams, such as the number of judges and cases, budget and state fee collected, all relative to the population). Where possible, the indicator for one or more individual courts shall be displayed with the indication of the national median or average.

The most common and often the most convenient way to display a multitude of information with a large number of items in one single snapshot is a simple grid/table of data. This way of representation is considered easy to use by the majority of users accustomed to work with Word or Excel and it is also simple and easy to develop.
For example, the first of the two tables below shows an "overview" of:
the number of cases (cases pending at the beginning of the reference period, cases received and cases resolved during the reference period), the analysis of possible delays (cases pending for a period longer than two years), the Rate of variation of the stock of pending cases and the Estimated duration of the liquidation of the stock of pending cases.

19.1 General requirement

The design shall be sober, elegant and airy, and in compliance with the visual identity of the customer. Graphical interfaces will provide users with consistent browsing experiences, will be intuitive and easy to use.

Suggestion for CSS file structuring:

- style.css - common styles, applied both on the public site and in administration
- ensure the possibility of editing WYSIWYG in CMS
- public.css - applied only to the public site;
- admin.css - applied only to the administration site;
- mobile.css - applied only for mobile devices;
- print.css - applied to the print version;
- CCS specific to the main types or categories of information – applies only in those cases (e.g. gallery.css, publications, tree-view, etc.);

The provider will present its own design variants for the homepage and for the web pages content (after the assessment period), the lay outs being then iteratively adjusted to respond to the project needs.

Public site design (front-end):

- Mobile (tablets and smartphones), portrait or landscape oriented;
- Desktop and laptop terminals;
- All range of browsers used worldwide, covering at least 90% of total number of users;
- The page format will take into account the need to render useful content (HTML) with the help of voice and Braille readers, for people with visual/hearing disabilities.

The presentation pages will provide a unified and consistent browsing experience, being composed usually of common elements:

- Logo;
- Search;
- Language Selector;
- f. Navigation menu;

- g. Side column (left / right);

- h. Footer;
- The content itself, in turn composed of structural blocks.

19.2 Types of diagrams

Tables with the use of semantic colours (source: CEPEJ Handbook and the Judicial Statistics):

Type of cases	Pending cases on 1.1	Incoming cases	Resolved Cases	Pending cases		Clearance Rate (CR - %)	Disposition Time (DT - days)
				On 31.12	> 2 years		
Civil cases	**15 619**	**4 127**	**4 121**	**15 625**	**NA**	**100%**	**1 384**
Civil 1st instance	14 288	3 172	2 887	14 573	NA	91%	1 842
Non-contested	478	911	680	709	NA	75%	381
Inheritances	853	44	554	343	NA	1259%	226
Administrative cases	**1 947**	**1 720**	**1 107**	**2 560**	**NA**	**64%**	**844**
Commercial disputes	**301**	**766**	**431**	**636**	**NA**	**56%**	**539**
Criminal cases	**34 256**	**88 002**	**70 250**	**52 008**	**NA**	**80%**	**270**
Criminal - General division	5 719	4 283	1 462	8 540	NA	34%	2 132
Criminal - Serious crimes	2 332	1 158	578	2 912	NA	50%	1 839
Minor offences	26 205	82 561	68 210	40 556	NA	83%	217
Total [Year]	**52 123**	**94 615**	**75 909**	**70 829**	**NA**	**80%**	**341**

Figure 18.2 - Table of semantic colours 1

Nr. d/o	Instanța de judecată	Numărul total de cauze şi materiale parvenite în perioada de referinţă	Total cauze încheiate	Rata de variaţie a stocului de cauze pendinte
1	Curtea Supremă de Justiţie	11498	**11636**	101,2
2	Curtea de apel Chişinău	29300	**29061**	99,1
3	Curtea de apel Bălţi	6486	**6240**	96,2
4	Curtea de apel Cahul	1511	**1389**	91,9
5	Curtea de apel Comrat	884	**980**	110,9
6	Botanica, mun.Chişinău	13817	**13322**	96,4
7	Buiucani, mun.Chişinău	18456	**18771**	101,7

Figure 18.3 - Table of semantic colours 2

Instanța de judecată = Court of law
Numărul total de cauze și materiale parvenite în perioada de referință = Total number of cases and materials received during the reference period
Total cauze încheiate = Total cases closed
Rata de variație a stocului de cauze pendinte = Rate of variation of the stock of pending cases

Curtea Supremă de Justiție = Supreme Court of Justice
Curtea de Apel Chișinău = Chișinău Court of Appeal
Curtea de Apel Bălți = Bălți Court of Appeal
Curtea de Apel Cahul = Cahul Court of Appeal
Curtea de Apel Comrat = Comrat Court of Appeal
Botanica, mun. Chișinău = Botanica, Chișinău Mun.

Buiucani, mun Chișinău = Buiucani, Chișinău Mun.

The tables above also illustrate a use of "semantic colours" that have associated meanings, such as green for positive values /trends, light blue and grey to represent neutral or less important information (for example, information that was not available); and reddish hues to represent negative values/trends. The colour orange is traditionally used to represent the average or median value. All these contrasting colours aim to improve the understanding of the data and to successfully focus the viewer's attention on the relevant information. To the extent possible, the demarcation, by colour in diagrams and tables, of the categories of courts belonging to the three levels of jurisdiction, shall be ensured.

In addition to the data table, there are three types of diagrams that are frequently used to compare different values. These diagrams are the horizontal bar graph, the column graph and the line graph (for details see the CEPEJ Handbook). The bar or line graph shall be preferred for an individual court, when the indicator is visualised in chronological perspective (indicator dynamics, by indicating the percentage of variation of the indicator value).

To avoid cluttering a dashboard or graphic with data tags, the use of a special feature called "tooltips" is proposed. The "tooltips" feature allows data labels to optionally appear, when the user hovers over the graphic element with the mouse.

Dashboard (Slovenia) that includes horizontal bar graph (+ bar with filtering tools and tables using semantic colours)

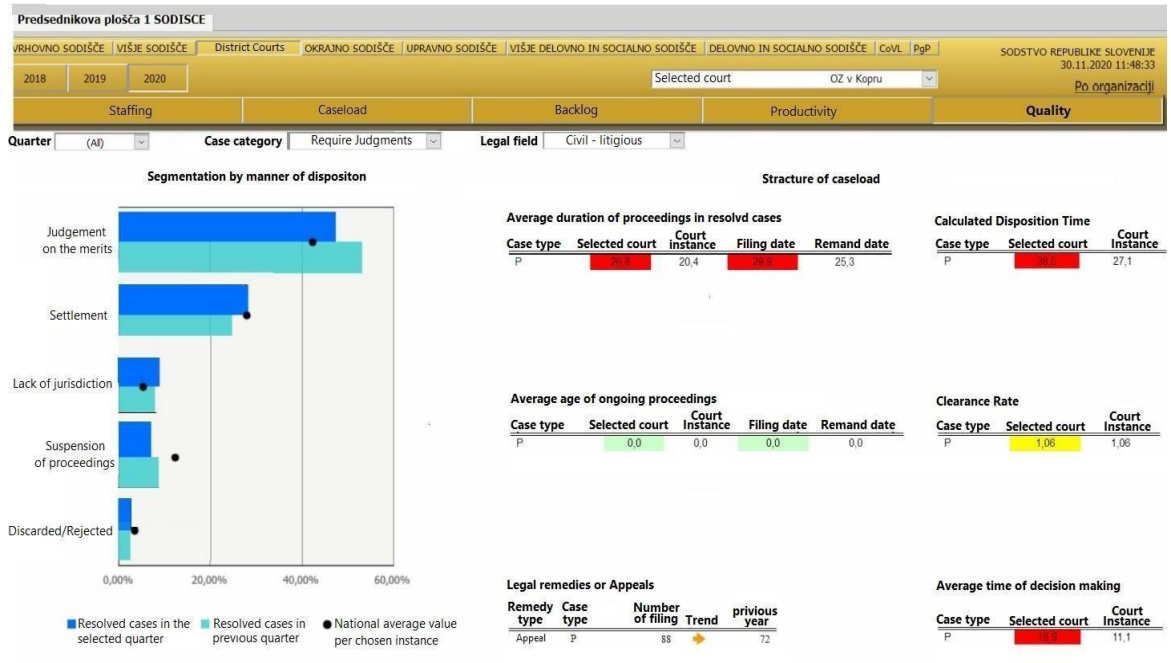


Figure 18.4 - Graph with horizontal bars and semantic colours

Column graph and demonstration of the "tooltips" feature (source: CEPEJ Handbook):

Figure 18.5 - Column graph and demonstration of the "tooltips" feature

Line graph and demonstration of the "tooltips" feature (source: CEPEJ Handbook):

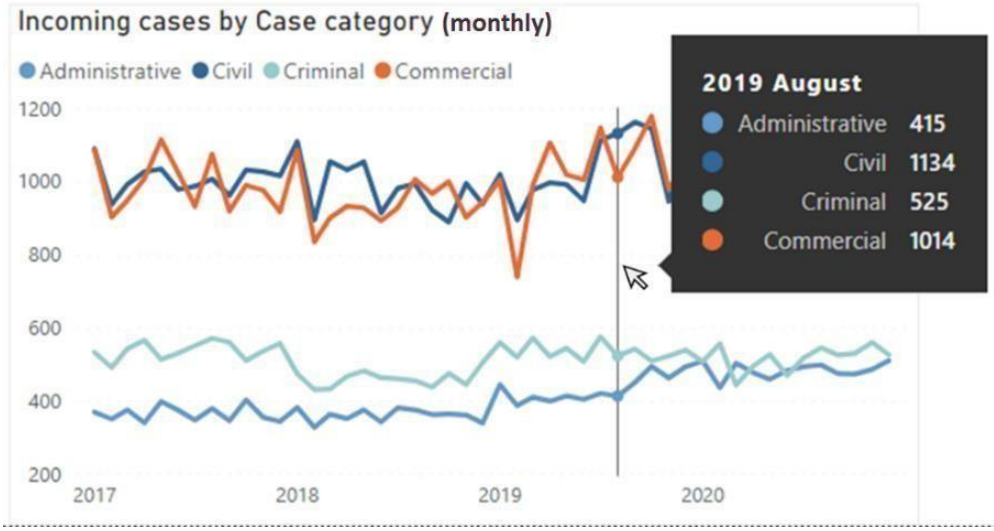


Figure 18.6 - Column graph and demonstration of the "tooltips" feature